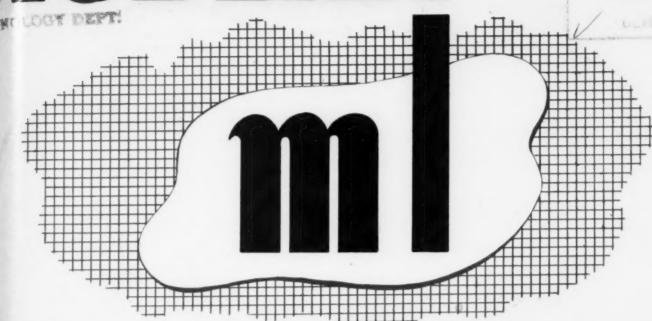
ODERN



JANUARY . 1943 . VOL. 11

ITHOGRAPHY



Senelith Inks

were the first lithographic inks

made from dyestuffs

treated with sodium tungstate

for better sunfastness

and are still leading

with their outstanding resistance properties

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 Greene Street

New York, N. Y.

ASSEMBLY or MESS CALL?





In the Army, it doesn't take long for even a raw recruit to learn the meaning of individual bugle calls and to act accordingly. O And in office or factory, even the newest employee rarely misses "production signals" that are flashed to him on the six easy-to-see, hard-to-overlook, wartime colors of

available in White and Ivory for Jetterheads



• Paper and paper products step in to guard plane parts with a moisture proof seal for shipping.

Paper and paper products prove faster, better and cleaner. They deliver vital plane parts for assembly, ready right then and there, for use.

And paper is stepping into other jobs in other businesses, particularly where shortages and priorities have curtailed the use of vital materials.

Paper may solve your problem, although a priority rating may be necessary to clear the way.

There are many unusual jobs that paper will do, many new requirements that paper will meet. And we know a good deal about these things because we have been making paper for many uses—making a thousand miles of it a day, in fact. Over many years we have

accumulated a rich store of experience and information which will enable us to supply papers for many new and amazing uses when materials are available.

Oxford merchants and Oxford salesmen are ready to take care of your paper needs with Oxford papers.

Can paper products take the place of scarce materials vital to the war effort? All our research facilities are concentrated on finding the answers.

OXFORD PAPER COMPANY

230 Park Avenue, New York, N. Y.

Mills at Rumford, Maine & West Carrollton, Ohio

Western Sales Office:

35 E. Wacker Drive, Chicago, Ill.



MODERN LITHOGRAPHY

PUBLISHED IN THE INTERESTS OF LITHOGRAPHERS EVERYWHERE



The Cover
This photograph "The Mills
Are Mighty," by Walter
Farynk, selected from U. S.
Camera, 1943, symbolizes 1943
America with all its many
industries pointing full effort
toward winning the war. For
other selections from the
camera annual see page 26.

January, 1943 Volume 11, No. 1

BOTH EMPLOYEES AND MANAGEment have been a little bewildered by the recent Wage Stabilization Act. This month we have a complete and accurate set of questions and answers on the Act, applied to litho plants. (See page 19).

Things are happening fast in the lithographic industry. During the last month, action has been taken by the government on paper (page 33), film (22), labels (24), and bronze powder (43).



Editor-In-Chief WAYNE E. DORLAND

Managing Editor ROBERT P. LONG

Technical Editor

Advertising Manager THOMAS MORGAN

WHAT YOU WILL FIND IN THIS ISSUE

	Pag
Editorials	15
Year-end Review of Technical Developments By Irene H. Sayre	16
What is the Law on Wages?	19
Order Curtails Film Manufacture	22
Labels Face Further Cut Under 1943 Food Plans By H. H. Slawson	24
U. S. Camera, 1943, Shows Best of Photographs	26
Washington Letter	28
By Jay H. Bonwit	
Consider War Conversion for Printing and Litho Plants	31
Order 10' Cut in Use of Printing and Book Paper	33
Shop Talk	35
By Irene H. Sayre	
In and About the Trade	39
New Equipment and Bulletins	49
Lithographic Abstracts	53
Classified Advertisements	59
Index to Advertisers	61

MODERN LITHOGRAPHY

Reg. C. S. Pat. Office

GRANT A. DORLAND, President; IRA P. MACNAIR, Vice-President: WAYNE E. DORLAND, Secretary-Treasure. Published monthly on the 15th by The Photo-Lithographer, Inc., Advertising and Editorial Office, 254 W. 31st St., New York, N. Y. Anvertising Rates: Advertising rates made known on application. Closing date for copy—20th of the month previous to date of issue. Subscription Rates: \$3.00 per year in the United States, \$4.00 per year in Canada. Single copies, 30 cents. Entered as seeing class matter at the Post Office at New York, N. Y., under the Act of March 3, 1879.



TANKS have got to be tough. So have the treads they roll on. The tank treads being manufactured by the newly formed Robport-Maklin War Project Division are tough—tough as the marines on Guadalcanal—tough with the same kind of toughness you have learned to know in Robport Blankets.

While the new division turns out the toughest treads for the tanks of

America, you can still get the same tough Robport Blankets as always. Our new work of supplying toughness for Uncle Sam's forces still allows us to take care of the lithographic industry's needs.

Robport Blankets are truly tough tough for longer life, tough for economy, tough for quality, tough for efficiency, tough for all the reasons you can think of why a blanket must be tough.

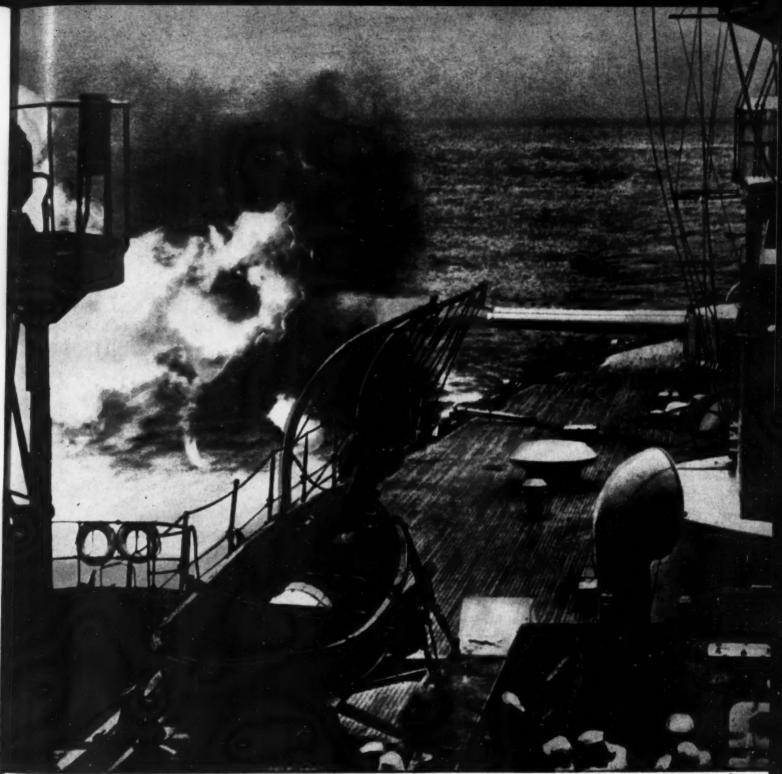
ROBERTS & PORTER

INCORPORATED

New York: 100 Lafayette St.

Chicago: 402 S. Market St.

Canadian Representative: Canadian Fine Color Co., Toronto, and Montreal



Official U. S. Navy Photograph.

COLOR IS MIGHT!

The potential might of color is unlimited. Its power is reflected in all activities of life. It is essential to the fraternity of mankind.

Sinclair and Valentine Co.

Main Office and Factory: 611 West 129th Street, New York City

GRAVURE INK



Assigned to Special Duty

It is in times of great national emergency that every American drops what he is doing and takes his assigned place in the ranks of the forces which guard the safety, the inviolability not only of the shores of this country but of the rights and the privileges that make it a country worth fighting for. This is his payment in return for the privilege of being an American citizen.

Some are not called to fight. Some must serve in the equally vital task of producing arms for America's fighting forces. Others play an equally impor-

tant role in maintaining the basic civilian economic and social structure which cannot be permitted to collapse if the nation is to be a highly efficient fighting machine. To each is given responsibility in the measure of his capacity. This is as true of corporations as it is of individuals.

The Miehle organization with its known resources for precision machine

manufacture was "called to the colors" early. Long before Pearl Harbor, Miehle was manufacturing large quantities of naval ordnance. In fact, it is one of the first fourteen American concerns to be awarded the famous Navy "E" for "outstanding performance in the production of naval ordnance matériel." Today, Miehle is working 24 hours a day, seven days a week in the war effort.

Thus assigned to special duty, Miehle doubts that there will be any new Miehle presses made until the war is over, peace is won, and

we can all go back to our peaceful pursuits. Until that time, Miehle asks—and has been given—the understanding sympathy and cooperation of all its printer friends. We will maintain, as long as we are permitted to do so, our staff of field machinists and repair parts services so that your present Miehle presses can be kept at their usual high efficiency.

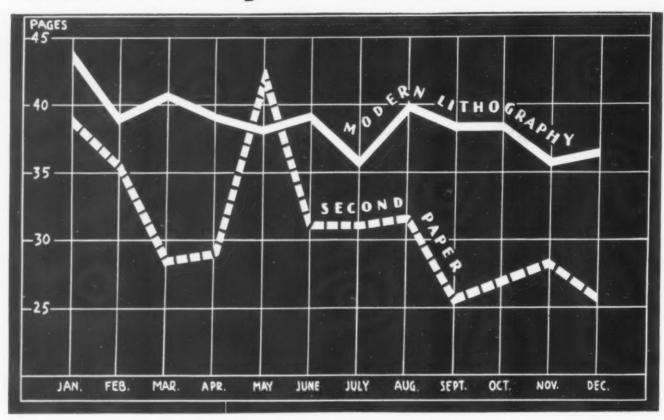
The main thing is to win this war. To that end no sacrifice is too great.

MIEHLE PRINTING PRESS & MFG. CO., Chicago, Illinois



Official U. S. Navy Photograph

One Reason Why More People Read m



Comparative Number of Pages of Reading Matter During 1942 Total for 1942: ML—467 pages of reading matter. Second paper—376 pages. Monthly average: ML—38 pages of reading matter. Second paper—31 pages.

Subscribers to Modern Lithography get more reading matter per issue — so much more in fact that it's like getting about three extra copies a year. Look at the above chart which shows the actual number of pages of reading matter carried during 1942 by ML and the second publication. This is one reason Modern Lithography has the largest paid circulation in the field.

If you are not a regular reader of Modern Lithography, or if you borrow, beg or steal ML from others in your plant—why not enter your own personal subscription today? Be informed. You'll find it well worth the small investment.

Modern	Lith	ography
254 We	st 31	St.
New Yo	ark N	I V

Enter subscriptions to Modern Lithography as indicated below. Enclosed is in check or money order.

Send to.....

Firm

Address

Note: If you wish to enter subscriptions for men in the Services or any other additional subscriptions, list them on a separate sheet of paper and attach to this coupon. Rates: One year—\$3.00. Two years \$5.00. \$4.00 per year in Canada.

Group rates: Four or more subscriptions entered together and paid for as a group may be entered at \$1.50 per year each.

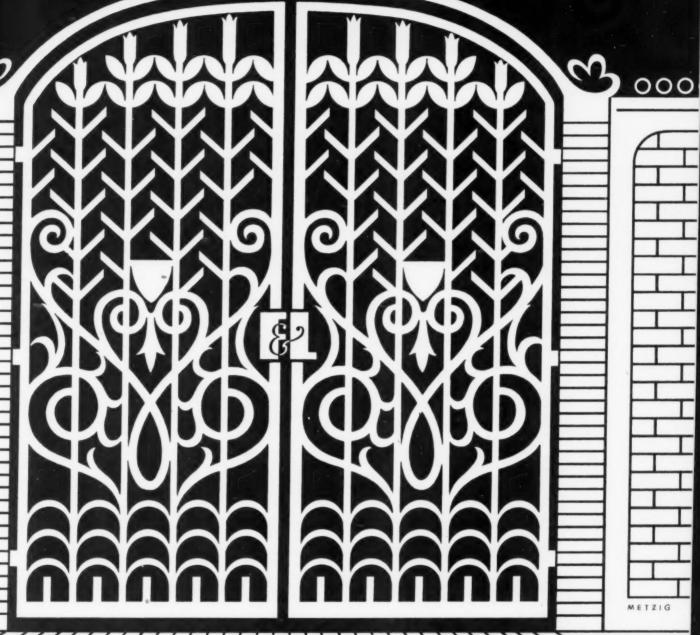
SPECIAL RATE FOR SERVICE MEN—
\$1.50 per year.



MODERN LITHOGRAPHY

254 WEST 31st STREET, NEW YORK

THE COR



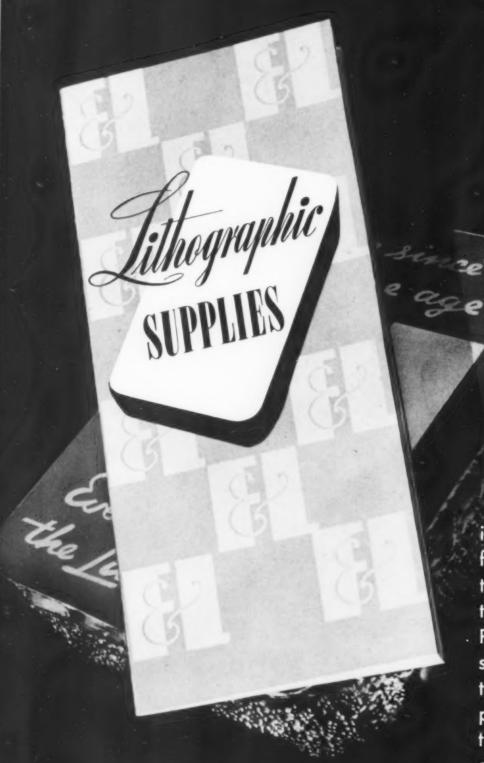
If we had a door or gate like this, it would have been donated to the salvage campaign long ago. Figuratively and literally, though, F&L holds open the door to improved pressroom performance with inviting colors in concentrated inks and outstanding technical service.

THE FUCHS & LANG MFG. COMPANY

TESTABLISHED 18701 + DIVISION GENERAL PRINTING INK CORPORATION

100 SIXTH AVENUE . NEW YORK

BOSTON CHICAGO CINCINNATI CLEVELAND ST. LOUIS FORT WORTH PHILADELPHIA SAN FRANCISCO LOS ANGELES TORONTO CANADA



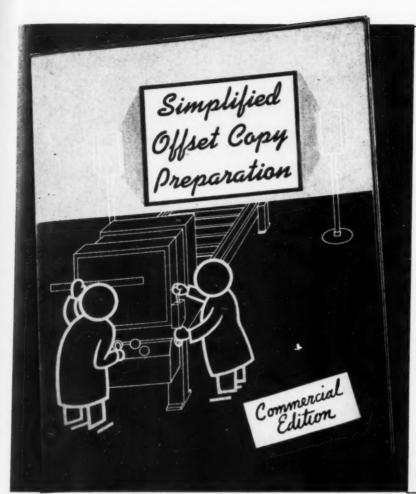
for the Lithographer"

for years and truly lived up to those four words, but today there are some restrictions. Perhaps, under the circumstances, it should be amended to "Everything we are permitted to supply the Lithographer." Often we have anticipated your needs;

always we have fulfilled them. In keeping with that policy, we present the New Lithographic Supplies Catalogue. Write for your copy today.

THE FUCHS & LANG MFG. COMPANY

(ESTABLISHED 1870) » » DIVISION » GENERAL PRINTING INK CORPORATION 100 SIXTH AVENUE, NEW YORK, N. Y. BOSTON CHICAGO CINCINNATI CLEVELAND PHILADELPHIA ST. LOUIS SAN FRANCISCO FORT WORTH LOS ANGELES TORONTO, CANADA



JUST OFF THE PRESS

Rapidly increasing governmental demands for manpower have created large gaps in personnel formerly devoted to the creative and promotional development of offset printing. It is among these men that a large volume of printing is either projected forward into printing and offset paper orders or allowed to remain an idle day dream instead of an actuality and conversion into dollars and profits.

This book, distributed gratis upon receipt of your request should be used to help keep alive the spirit of printing promotion essential to the maintenance of sales volume through 1943. Write for your copy today,

GEORGE A. WHITING PAPER CO. MENASHA, WISCONSIN

Manufacturers of Fine Offset Papers
Paccmaker Offset Brockway Covers



RELIABLE LITHOGRAPHIC PLATE CO., Inc.

The Pioneer Plate Grainers of America

ALL PLATES

INCLUDING THOSE REGRAINED FOR MULTILITH

ARE MARBLE GRAINED

ELIABLE" is far more than just part of our name. It means to our customers that our plates can be depended on to give first-class results because from start to finish the graining is handled by experts of long experience. Our plates are made right to work right—they are reliable!

We carry a full supply of Zinc and Aluminum Sheets for Offset, Rotaprint Presses, in fact for all the lithograph MILL
SELECTED
METAL
USED
EXCLUSIVELY

(MADE IN U.S.A.)

A trial order should "sell" you our services and products.

RELIABLE LITHOGRAPHIC PLATE CO., INC.

INCORPORATED 1916

17-27 Vandewater St. and 45 Rose St., New York, N. Y. • Phone: BEekman 3-4542

"

ed to

ıy ıs.

n-

d

e

5;

nt

EMPTY GAS TANKS make FULL MAILBAGS



DIRECT mail is gaining many converts today, as its speed and economy assume new importance in the battle for freedom. It frequents territories now inaccessible to the representatives who once traversed them; helps maintain equipment formerly serviced by factories; presents merchandise currently available; sells bonds; and maintains morale. To America's needs in such vital home activities, on fighting fronts, in supply lines, Champion devotes its entire organization, resources and skill.





THE CHAMPION PAPER AND FIBRE CO., Hamilton, Ohio

MILLS AT HAMILTON, OHIO . . . CANTON, N. C. . . . HOUSTON, TEXAS

Manufacturers of Advertisers' and Publishers' Coated and Uncoated Papers, Cardboards, Bonds, Envelope and Tablet Writing . . . 2,000,000 Pounds a Day

DISTRICT SALES OFFICES

NEW YORK · CHICAGO · PHILADELPHIA · CLEVELAND · BOSTON · ST. LOUIS · CINCINNATI · ATLANTA

EDITORIALS

So much has happened during the past month in the way of government orders applying directly to the lithographic industry that instead of a year-end review, a month-end review seems more in order.

The paper freeze order, which reduces manufacture of most kinds of paper by approximately 15 per cent is being followed by a companion order reducing available supplies of paper to users. This new reduction in the use of paper takes the form of a ten per cent cut from 1941 consumption of commercial printing papers, and ten per cent from 1942 tonnage in the case of paper for books. This is based on advance information obtained from the WPB, as copies of the orders have not yet been distributed generally. This reduction was less than some observers believed probable.

Lithographers who thus far have been able to maintain nearly normal volume, when they could find sufficient orders, now face the very real problem of making the most of what paper continues to be available. In many cases they will be forced to choose between customers, deciding on which job should get the available paper. Management will be interested in keeping the largest possible amount of equipment operating with the least amount of paper. It will be a real test of sales and management ability. There is every reason to believe, incidentally, that the conditions making the paper restriction order necessary, chiefly, manpower and transportation shortages will become more rather than less acute, during the coming year.

On the other hand, indications are that a curtailment order on paper board for window displays is not in process at present. When and if it is written, the Printing and Publishing Branch of the WPB will write it, and not some other branch disinterested in the graphic arts, we are told. Some national advertisers in making up advertising budgets and placing orders for 1943 displays are writing into their orders the stipulation that the lithographer guarantee to obtain the necessary paper board for the displays. This is grossly unfair to any lithographer for nobody

can possibily know what the situation will be a year from now, or even a few months. Lithographers should not be forced to hold the bag for advertisers in order to bid successfully for the work.

HE first order on photographic film was issued at the year's end, and reduces the 1943 manufacture of cut film for non-war use to 76 per cent of 1941 production, A special provision is incorporated in this order affecting Preference Rating Order No. P-100. "No person shall apply, extend or otherwise use a preference rating pursuant to Preference Rating Order No. P-100 for the purpose of acquiring any film or film base whatsoever," the order states. We are told that this means that lithographers may no longer use the A-10 priority rating. If film is not available from local sources, then application should be made to the Printing & Publishing Branch of WPB in Washington on a PD-1-A form, for a special priority rating. There appears to be no immediate shortage of film but it will obviously be wise to promote all possible economies in the use of film. The order, in rather complete form, appears elsewhere in this issue.

Bright spot of the year-end developments was the amendment to the bronze powder order which allows lithographers and printers to use existing stocks of inks, pastes or dusting powders. Army and Navy needs have been met and the estimated 500,000 pounds in present inventories is not suitable for any war use. It is significant that no date limit was set on the amendment—apparently the question has at last been settled for the duration. Of course there will be no more manufacture of these metallics, however, so economy in their use is still necessary.

The freeing of bronze powder is the result of continuous efforts of the various associations of lithographers and ink manufacturers. Had the amendment not come through, a large amount of dusting equipment in lithograph plants might have been standing idle at this writing.

Survey Reveals Impariant Lithographic Development During First Year of W

By

I. H. SAYRE

TECHNICAL EDITOR

New halftone screen methodust

As should be expected, less progress has been made in general in 1942 by way of new products for the trade than in previous recent years due to the lack of raw materials and demands of war production. However, the one outstanding contribution to the betterment of quality in lithographic printing is unquestionably the latest contact screen produced by Eastman Kodak Company which tops anything done in the past twenty years.

The new contact screen has not been released to the trade, and will not be available for the duration. For fidelity of reproduction, it is the nearest thing to continuous tone rendition that we have seen. This is not the original Kodagraph Orange Contact Screen, but a new magenta contact screen which is placed in contact with the unexposed emulsion in a vacuum backed camera and a halftone is made upon exposure to light. The continuous tone

magenta negative required in the original contact screen process is eliminated. It is therefore more efficient as it requires only one piece of film, or one dry plate, to produce a negative. The time consumed in making the negative is much shorter and control need be exercised over only one exposure to one film instead of two as with the first process.

The first contact screen produced by Eastman Kodak Company is sort of orange red in color, while the second is a deep magenta with a slightly different dot structure. The final result of the first process was a positive, and required another contact exposure to produce a negative when it was used on albumen plates. By this new process a halftone negative is produced.

The screen as it now is produced is only practical for lithographers, but it may be adapted to other processes later.

It is possible to use either an

orange or magenta screen in the camera, but the magenta screen renders a slightly sharper image. The emulsion side of the screen must be in contact with the emulsion of the sensitive material, and vacuum contact is practically imperative. Approximately the same rendering of values, including highlights. should be obtained in using the magenta screen as with the orange screen. However, if screen positives are made directly through a magenta screen, or if screen negatives are made directly through an orange screen, the reproduction of tone values is somewhat distorted. Contrast control by means of color filters works oppositely with orange and magenta screens. For example: a low contrast original with the orange screen plus magenta negative should be exposed with a yellow filter (No. 4) whereas a magenta screen with original copy is exposed through a rose filter (No. 30). A



Many developments come from supply firms. This is a scene in the LPI laboratories.

tributions to this year's achievements are a number of improvements in the masking process for color correction such as the process described in U.S. 2,289,738 in which autopositive materials are used for making masks directly from a multicolored original during the reproduction of it. In addition to the time saved by making the mask at the same time the color separation negatives are made, such masks have the advantage of correcting for the toe and shoulder of the characteristic curves of the negative materials.

LUORESCING copy and fluorescing printing have taken their place in reproduction processes this year. Sketches and drawings prepared with pigments incorporating fluorescing materials are being employed for highlighting and color separation processes. In W. Marx's

in map-making or in natural color reproduction processes, the paints or inks with which the original is made contain three mutually separable fluorescent pigments and color separation is obtained entirely by fluorescent light. The process gives color separation positives directly rather than negatives.

To Eastman Kodak Company was also assigned a color correction method similar to the masking method, which is used in duplicating a color transparency or print, or in making color separation negatives therefrom, or for printing a color positive from a color negative. A monochromatic colored light is employed with a selected wave length at which absorption of each of the yellow, magenta, and blue-green layers in an original is in proportion to the correction desired in accordance with the amount of the other colors present.

odiust revealed, described as the "best thing in 20 years"

high contrast original in the first instance is controlled by exposure through a rose filter and with the new magenta screen, through a yellow filter.

The film used is Kodalith Ortho, or Thin Base Kodalith Ortho, which is placed over the vacuum back of a camera. The magenta screen is laid over the film, emulsion to emulsion. The screen may be taped along the top edge to the suction back and folded back during removal of the exposed film, to make ready for the exposure of another film.

Where intermediate contrasts are desired, part of the exposure is made with a filter and part without.

Packaged Kodalith Developer must be used (not in Kodak Developer D-85) at 65°F. The developing action is stopped by immersion of the film for ten seconds in Kodak Stop Bath SB-la. The usual F-5 fixing bath is satisfactory.

Other outstanding Eastman con-

Fluorographic process of highlighting halftone images (see Modern Lithography August 1942) a fluorescent material is combined with the water color used in making the sketch to be copied. Two exposures are made in the camera, the first in the usual way and the second with a filter transmitting only ultra violet light. The second exposure eliminates the dot structure, and thus accentuates the highlights.

The Murray and Yule Fluorescence Process is a means of obtaining color-corrected separations from sketches and drawings executed with specially prepared water colors containing fluorescent material. Both of these processes have been described in previous issues of *Modern Lithography*. Another patent issued to Murray and Yule and assigned to Eastman Kodak Company which entails the use of fluorescent pigments is U.S. 2,278,114 which describes a method for color separation either

Usually no correction is needed for the yellow, and therefore proportion need be adjusted only between the other two color layers. A sensitive sheet is placed in printing relation (either contact or projection printing) with the original and exposed to the colored light and is then made into a mask which may thereafter be used in register with the original for color correction.

To interchemical Corporation of New York was assigned U.S. 2,272,638, A. C. Hardy, which is an electro-optical color reproduction system, in which color separation negatives are first made photographically and then scanned. The signals corresponding to all three separations, or at least to two or them, are combined linearly (subtractively) to give a separation signal corresponding exactly to the trichromatic coefficients required by theory. The patent applies to all types of color correction in which color-separation negatives are first



Many of the technical developments of the past year were in camera methods. Outstanding developments was the new contact screen which is described here for the first time.

made photographically and then scanned electro-optically.

Another interesting invention in Electrophotography is covered in U.S. 2.297.691 which involves the use of materials such as sulfur. anthracene, anthroquinone, etc. which are insulators in the dark but which become partial conductors in the light. These materials respond to light, being slightly conductive when they are illuminated and again becoming insulating when the light is cut off. These photoconductive insulating materials are used to control electric charges in such a way as to produce an electrostatic latent image which is developed to make a visible picture. The above may be used for typographical printing cuts.

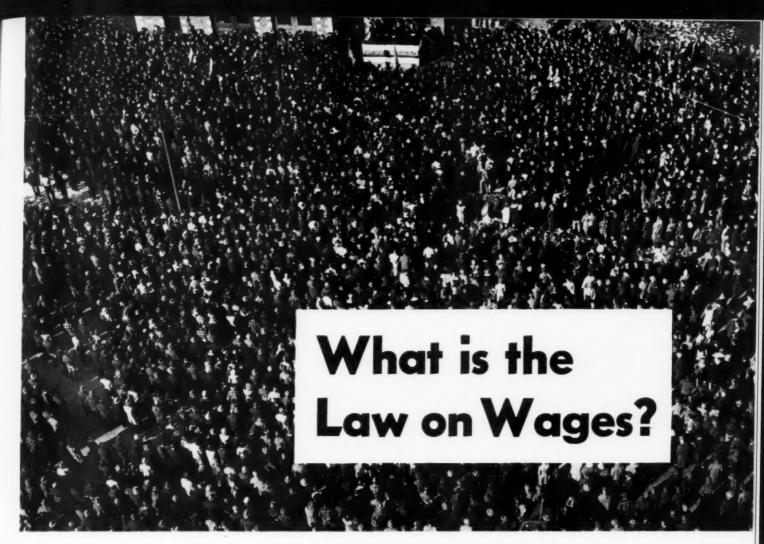
AERIAL photography and map making has focused attention on stereoscopic printing which is making such strides as to suggest the possibility of printing of a third dimensional type in the near future. There are too many approaches to the new stereoscopic print to describe them all, but a recent patent assigned to Polaroid Corporation describes a stereoscopic print consisting of superimposed vectographs with their vibration axis mutually at right angles, mounted on a reflecting surface consisting preferably of aluminum flake. All stereoscopic prints to date must be viewed through especially prepared spectacles.

Further patents have been issued for various kinds of photo-type composing machines. A number of these will be marketed after the war, but will not be seen until then. Manufacturing rights on U.S. 2.261,538 were assigned to International Business Machines Corporation which covers a device for photographing printed or typewritten matter. It has a photoelectric system which senses the amount of justification necessary and controls the photographing operation to effect such justification.

Also assigned to Intertype Corporation is a new typographical matrix for photographic use (U.S. 2.277.825). The type carrying member supports a stencil carrying plate which is carried between two relatively rigid supporting members. Means is provided for accurately positioning the character on the support.

IN addition to their very fine work in plate coatings and lithographic supplies. Harris. Seybold, Potter Company has brought a new small press, the LTE, which is not yet available to the trade. The Harris. Seybold, Potter Company has done an excellent job in developing good substitutes in plate coatings, desensitizers, and gum. Some of these new products are superior to the old. A more detailed description of these products may be found in J. S. Mertle's article in the May issue of Modern Lithography.

U.S. 2,285,430 describes a new lithographic ink which permits the speeding up of lithographic processes and makes possible for the first time litho web printing on non-absorbent metal such as tin plate. The ink comprises a water repellant natural or synthetic resin dissolved in a volatilizing solvent consisting of paraffin hydrocarbons free from unsaturated and aromatic constituents. By using a small furnace heated from 100 to 2,000 degrees F. the time of drying for the ink is reduced from 20 to 30 minutes to 2 to 3 seconds and the sheet metal may be run through the press and furnace in web form. This has been assigned to Interchemical Corporation of New York.★★



Manpower and wage restrictions are big litho problems of 1943. General Electric employees (above) typify millions needed in vital war industries.

ANPOWER is lithography's most serious problem for 1943. Manpower—and not shortages in raw materials; manpower—and not curtailments in consumer advertising; manpower—and not the transportation problem, severe as it is, will, in the last analysis, determine lithographic volume in 1943.

Not counting the workers who will go into the fighting forces from nonessential industry in 1943, the number of workers required for war industry alone during the year will be 5,000,000. This is based on the latest report of 15,000,000 currently employed in war industry and the official belief that 20,000,000 will be needed by the end of 1943. The total manpower goal for the year is set at 65,000,000. That compares with the currently reported actual figure of 58,000,000. Thus, 1943 calls for migrations from less essential industry to war industry, and enlistments of new and unemployed workers to the tune of 7.000,000.

To the lithographer this shifting about of 7,000,000 workers means increased competition from war industry in the form of higher wages paid employees, resulting in (a) greater labor turnover, (b) adoption of an apprentice or trainee system for green employees, and (c) increased wage adjustment, wage scale and cost problems arising out of employment of women to take the place of men.

These management problems, of their own unaided weight enough to add many a gray hair, have been further complicated by the Wage Stabilization Act signed by the President in October. Under it the Office of Economic Stabilization has been established with broad powers relating to control of civilian purchasing power, prices, wages, salaries, rents, profits, and similar matters. In the allocation of these powers, the National War Labor Board and the Bureau of Internal Revenue were appointed to regulate all wages and

salaries. Thus, strict governmental controls and restrictions over all wages and salaries in the lithographic industry are now in operation. Inasmuch as these controls and restrictions intimately affect the management problems stated above, it is important that the lithographer have as thorough an understanding of them as possible.

In dealing with the serious question of keeping employees at production peak in face of curtailed wage incentives, how to keep employees from leaving for other plants which may be paying higher starting wages, knowing what kind of increases to give in order to maintain employee morale, knowing how to handle workers to whom raises cannot be given—in all of these management problems a workable knowledge of the "ins" and "outs" of the Wage Stabilization Act can be a potent tool.

Moreover, the Wage Stabilization Act is braced by a ring of severe



MANPOWER—lithographic management's No. 1 problem for 1943, is intimately involved with the Wage Stabilization Act. Here are accurate questions and answers telling what can or cannot be done with wages in your litho plant

penalties for employers and employees alike who unintentionally or not veer from the dictates of the regulations. An understanding of the operations of the Act is therefore a protection.

The structure designed to make wage stabilization work is complex and detailed. The following analysis has been arranged in question and answer form for simplicity and clarity. It was taken from a recent special analysis prepared by the field staff of the Labor Relations Institute, New York, and is presented with their permission. It has been approved by the Office of Economic Stabilization.

Are all employers covered by these requirements?

No, employers who have eight or less workers may make increases without approval of the War Labor Board.

Must all increases have War Labor Board approval?

It is important to know that the War Labor Board is concerned primarily with two types of increases; one is the general increase. The other is the individual increase. General increases mean raises to an entire plant, a department or a group of workers in a specific classification, such as, pressmen, platemakers, strippers, cameramen, etc. Increases for these groups must have WLB permission. Individual increases on the other hand, may be given without WLB approval, but only under certain conditions.

Raises to individual workers may be given without WLB authority or approval, provided they result from the following:

(a) Individual promotion or reclassification. An employee who is promoted to a higher job should be informed by letter, as proof for inspectors that the pay increase came as a result of promotion. A reclassification and promotion form should be established for this purpose and filed.

(b) Individual merit increases within established rate ranges. This provision is operative only if the employer has made it a practice in the past to increase workers' pay on the basis of merit. The increased wage given for merit, in no case, must exceed the established highest rate for the particular job. Thus, a pressman receiving a top rate of \$2.25 an hour (or whatever the top is in your plant) cannot receive a merit increase on that job. Only a promotion or reclassifica-

tion can be the basis for increasing his present rate.

(c) Operation of an established plan of wage or salary increases based on length of service. The plan, however, must have been established and in operation prior to Sept. 15, 1942.

(d) Increased productivity under piece-work or incentive plan. This does not mean that the basic rates now being paid can be changed. It simply means that if an employee working under an incentive system produces more, he is entitled to the additional pay.

There seems to be no prohibition in the act for employers to change, where possible, their hourly workers to a piece-rate or bonus system in order to give them the opportunity to earn more money by producing more. However, the workers must be guaranteed a minimum of the same wages they are now receiving under the hourly rate. In other words, the WLB will not approve any decreases in pay.

(e) Operation of an apprentice or trainee system. If it has been the employer's policy in the past to increase the rates of new workers or apprentices on the basis of length of service or increased skill, then this provision can be used.

(f) Equalizing the pay of women doing and turning out production similar to men. Obviously, if the jobs have been simplified for the women, then this provision need not hold.

What are wages?

Wages are compensation computed on an hourly, daily or piece work basis.

What is meant by salary?

Salary is compensation computed on a weekly, monthly or annual basis. In computing the amount of the salary, include overtime payments, bonuses, gifts, and all other forms of compensation except insurance and pension funds. The same applies to wages.

If the employer is in doubt as to whether or not a proposed individual increase can be given without WLB approval, what does he do? He applies for Form No. 1 from the local Wage and Hour office.

May a union or an individual employee apply for these forms?
Yes.

Must every employee's request for an individual increase be forwarded to the WLB for action?

Not at all. Employers are free to turn down increase requests if they feel the worker does not deserve more money, or costs and other factors make the raise inadvisable. While the employee has a right to ask the Wage-Hour Division for a ruling on whether or not certain increases are allowable, it does not follow that the employer must grant such increases. For mor-

ale's sake, employers should explain the reasons for turndowns.

After form No. 1 has been filled out, with whom is it filed?

It is filed with the local Wage and Hour Division. Do not send any forms whatsoever, regarding increases, to Washington or the Regional WLB. All applications must be sent through the local Wage and Hour Division.

If the local Wage and Hour office rules that a requested individual increase may be granted, can the employer consider that ruling authoritative?

Yes. However, all local Wage-Hour office rulings will be reviewed by the Regional Director of the WLB. If he finds that the increase should not have been granted, then the employer will be informed of the reversal. The decision of the regional office will not be retroactive. In other words, the employee will not have to return the amount he received as increases, but simply go back to his previous scale. If the regional office reverses a local Wage-Hour office ruling, the employer will not be penalized and will be able to deduct the amount of the increase paid from his taxable income.

In the case of general increases, what form does the employer have to fill out?

Form No. 10, obtainable from the local Wage-Hour office. This form, when filled out, must not be sent to Washington, or the regional office, but to the local Wage-Hour Bureau.

May employers make individual contracts with employees, calling for higher than standard wage payments?

No. The Act specifically covers both individual and collective bargaining rates.

What records should the employer maintain to avoid penalties and employee grievances?

If an employee's request for an increase has to be turned down because of the limitations of the Stabilization Act, he should so be informed by letter. Special forms for reclassification of workers to higher jobs should be part of the company's records.

To provide a basis for individual merit increases which may be given without WLB consent, the company should establish an employee progress rating system for all employees—office as well as factory personnel.

What can you do if another firm offers higher wages for essentially the same work?

Before the War Labor Board will consider a change in the wage scale to equal competitive pay, the employer will be generally obliged to try to solve his problem with the aid of the War Manpower Commission. There have been many cases where the WMC has been able to work out suitable

plans for holding workers in their jobs despite lower starting scales. If the War Manpower Commission cannot help then the employer will have a better case to present before the WLB for a requested general increase.

What about wage increases given after September 15?

Increases given on or before October 3, 1942 have been approved by the WLB but subject to its review powers.

Can an employer give a worker increased insurance benefits or step up his retirement pension fund?

There is nothing in the Act that forbids such a move, but the increase must not be in an unreasonable amount.

Does the Act still apply if the employer has two plants or offices, each with less than eight employees?

If the total for the two establishments exceeds eight workers, then the Act applies.

If a low starting scale creates difficulty in getting new employees, can that scale be increased to area standards?

Not without War Labor Board permission. The WLB will not usually

States

I Maine, New Hamp-

shire. Vermont.

Region

consider requests for higher starting pay scales unless the employer has first tried to solve his manpower situation with the aid of the War Manpower Commission. Employers faced with this problem should call the regional WMC for suggestions. If the Commission cannot recommend a way out, then the employer should file Form No. 10 asking for a change in starting scales.

Can an employer increase wages to meet the rates which a competitor is paying?

No, not without WLB approval. If the rates the employer is paying are drastically out of line with those paid by a competitor, then the company should be able to establish a good case by claiming that gross inequities exist. He should file under Form No. 10. Firms are cautioned to fortify their cases by giving detailed data on wage rates in competitive plants. The Board will want proof; not opinions.

(In order to thoroughly cover the many questions on this vital subject this article purposely has been written in a comprehensive length. The second and concluding part will appear here next month.—Ed.)★★

Address

No. 10 P. O. Square, Room 726, Boston,

NAMES AND ADDRESSES OF THE REGIONAL DIRECTORS

Saul Wallen

Regional Director

	Mass., Rhode Island and Connecticut		Mass.
H	New York and New Jersey	Theodore W. Kheel	Chanin Building, N. Y. C.
III	Pennsylvania, Vir- ginia, Delaware and Maryland and Dis- trict of Columbia	Sylvester Garrett	573 Broad Street, Sta- tion Bldg. Philadelphia, Pennsylvania
IV		M. T. Van Hecke	116 Candler Building, Atlanta, Georgia
V		Lewis Gill	Room 888, Union Com- merce Bldg., Cleveland, Ohio
VI	Indiana, Illinois, Wisconsin, Minne- sota, Iowa, North Dakota and South Dakota	Robert K. Burns	Room 3008, Civic Opera Bldg., Chicago, Ill.
VII	Missouri, Arkansas, Nebraska and Kan- sas	Joseph A. Hoskins	Room 300, Mutual In- terstate Bldg., Kansas City, Missouri
VIII	Texas, Louisiana and Oklahoma	Floyd McGowan	716 Cotton Exchange Bldg., 608 North St. Paul St., Dallas, Texas
IX	Colorado, New Mexico, Montana, Wyoming, Utah and Idaho	Charles A. Graham	306 Midland Savings Bank Bldg., Denver., Colorado
X	California, Washing- ton, Oregon, Ne- vada and Arizona	Robert Littler	1355 Market Street San Francisco, Calif.



WPB order restricts manufacturers to 76% of 1941 production.

Army needs come first

HE manufacture of film for the lithographic industry will suffer a 24 per cent reduction from 1941 levels during 1943 under Limitation Order L-233 issued by the War Production Board and effective January 1. The order, covering all types of film, both amateur and commercial, specifically limits the manufacture of cut sheet film and film base in any of the three month periods of 1943, beginning with January 1, to 19 per cent of the amount manufactured during 1941. During 1943 this will amount to a total of 76 per cent of the total 1941 production. "Preferred orders" for various government war agencies are excepted. The requirements for the defense of the United States have created a shortage in the supply of critical materials for film and film base, the order states.

Officials of some of the film

manufacturing companies, in commenting on the order, pointed out that although the restriction allows manufacture of film up to 76 per cent of the 1941 levels, even this amount could not be guaranteed at all times because of the precedence necessarily given to government orders. Orders for materials for map production and other government war needs must come first and civilian industry must take what is available after that, whether or not it amounts to any given percentage of the 1941 figures.

No figures are available on 1942 film production so that the cut cannot be applied directly to 1942 production for comparative purposes.

The order follows:

PART 3147—PHOTOGRAPHIC FILM AND FILM BASE

(General Limitation Order L-233)

The fulfillment of requirements for the defense of the United States has created a shortage in the supply of critical materials for film and film base for defense, for private account and for export; and the following order is deemed necessary and appropriate in the public interest and to promote the national defense:

§ 3147.1 General Limitation Order L-233—(a) Definitions. For the purposes of this order:

(1) "Amateur-type still film" means roll films and 35 millimeter perforated films (whether packaged as cartridges, spools or in bulk) except 35 millimeter motion picture film.

(2) "Amateur-type motion picture film" means 8 and 16 millimeter reversal-type motion picture film.

(3) "Cut-sheet film" means film packaged in lots of individual flat pieces including film packs, but excluding X-ray film.

(4) "Group I products" means amateur-type still films and amateur-type motion picture films.

(5) "Group II product" means cutsheet film.

(6) "Group III product" means 35 millimeter motion picture film.

(7) "Restricted film" means Group (Continued on Page 57)

I. Group II and Group III products, and film base for such products.

(8) "Base period" means the calen-

dar vear 1941.

(9) "Manufacturer" means any individual, partnership, association, business trust, corporation, governmental corporation or agency, or any organized group of persons whether incorporated or not, engaged in the business of producing any film or film base whatsoever.

(10) "Preferred order" means any order, contract or subcontract placed by or for the account of the Army or Navy of the United States, the United States Maritime Commission, the War Shipping Administration, the Government of Canada, the Government of any country pursuant to the Act of March 11, 1941, entitled "An Act to Promote the Defense of the United States" (Lend-Lease Act), and government agencies or other persons acquiring film or film base for export to and consumption or use in, any foreign coun-

(b) General restrictions. No manu-

facturer shall:

(1) On and after December 16, 1942, produce any restricted film other than for preferred orders except in accordance with the provisions of paragraph (c) of this order;

(2) On and after January 1, 1943, produce and sell, lease, trade, ship, lend or transfer any restricted film pursuant to a preferred order except in accordance with the provisions of paragraph (d) of this order:

(3) On and after January 1, 1943. produce any film or film base other than restricted film, whether or not such production is pursuant to a preferred order except in accordance with the provisions of paragraph (e) of this

order.

- (c) Limitations on production of restricted film other than for preferred orders. (1) During the month of December, 1942, no manufacturer shall produce more film base (excluding preferred orders) intended to be used by any person for the production of finished Group I, Group II or Group III products than the following percentages of such film base (including preferred orders) produced by him during the base period:
- (i) Film base for Group I products,
- (ii) Film base for Group II product,
- (iii) Film base for Group III product, 7%
- (2) During the month of December 1942, no manufacturer shall produce more finished Group I, Group II or Group III products (excluding preferred orders) than the following percentages of such finished film (including preferred orders) produced by him during the base period:
 - (i) Group I products, 5%
 - (ii) Group II products, 7%. (iii) Group III product, 7%.
 - (3) During the three months period

beginning January 1, 1943, and for each three months period thereafter. no manufacturer shall produce more film base (excluding preferred orders) intended to be used by any person for the production of finished Group I. Group II or Group III products than the following percentages of such film base (including preferred orders) produced by him during the base period:

(i) Film base for Group I products,

(ii) Film base for Group II product.

(iii) Film base for Group III prod-

uct. 19%

(4) During the three months period beginning January 1, 1943, and for each three months period thereafter, no manufacturer shall produce more finished Group I, Group II or Group III products (excluding preferred orders) than the following percentages of such finished film (including preferred orders) produced by him during the base period:

(i) Group I products, 121/2 %.

(ii) Group II product, 19%

(iii) Group III product, 19%.

(d) Limitations on production and delivery of restricted film for preferred orders. On or before December 20, 1942, and on or before the first day of each third succeeding calendar month thereafter, each manufacturer shall file with the Director General for Operations a statement in writing in quadruplicate which shall include:

(1) Such manufacturer's proposed production schedule of restricted film for preferred orders so far as then planned, but in any event, for not less than the next succeeding calendar quarter.

(2) His proposed delivery schedules

of restricted film for preferred orders o far as then planned, but in any event for not less than the next succeeding calendar quarter.

(f) Special provision affecting Preference Rating Order No. P-100. On and after December 16, 1942, no person shall apply, extend or otherwise use a preference rating pursuant to Preference Rating Order No. P-100 (§ 958.2) for the purpose of acquiring any film or film base whatsoever.

(j) Avoidance of excessive inventories. No manufacturer shall accumulate for use in the production of any film or film base wnatsoever, inventories of raw materials, semiprocessed materials or finished parts in quantities in excess of the minimum amount necessary to maintain production of the rates permitted by the order.

(m) Applicability of other orders. In so far as any other order heretofore or hereafter issued by the Director of Priorities, the Director of Industry Operations or the Director General for Operations, limits the use of any material in the production of any film or film base whatsoever, to a greater extent than the limits imposed by this order, such other order shall govern unless otherwise therein.

* (Editor's Note—The omitted parts of Order L-233 deal with reports and other requirements affecting film manufacturers. The date of issuance was December 16, 1942.)

Agfa States Policy Under New Film Order

The following statement was issued amount of film we can produce in by H. A. Reeve, manager of the Professional Products Division of Agfa Ansco, regarding that company's policies in operating under the new film film allocated to them, but our abilrestriction:

"In order to comply with government restrictions outlined in General Limitation Order L-233, we are planning our 1943 production schedules in quantities to fill our share of the requirements of the armed forces of the United States and our allies insofar as they are now anticipated, and also the allowable percentage of our 1941 production for non-military distribution.

"To partially compensate for shifts in population due to increased war activities and other reasons, we propose to allocate film to our customers on the basis of 1942 purchases, even though the

1943 for non-military distribution is based on our 1941 production.

"We hope to be able to deliver to our customers the entire amount of ity to do so will depend on whether the requirements of the armed forces and important war plants are greater than now anticipated. Additionally, in view of the authority vested in the Director General for Operations as described in Order L-233, we may be requested to revise our production schedules from time to time.

"In order to keep an accurate running record of film shipments against allocations, we find it necessary to make shipments from one central point, and consequently we are asking all of our customers to send their film orders to the nearest Agfa Ansco branch rather than directly to Binghamton."

Labels Face Further Cut Under 1943 Food Plans

Many food items will disappear completely unless substitutes for tin are found. Government plans told at national conference

by H. H. SLAWSON

ize in production of labels for the food canning industry face a considerable reduction in the volume of this business which will be available during 1943. Added to the losses suffered last year when the processors were forced to discontinue use of tin for a long list of commodities, the impending situation may have serious effect on many label shops.

Indications of this future outlook were revealed in the reports and discussions heard at a national conference of food processors, held in Chicago, Dec. 14 to 16, at the call of government agencies. Present at the conference were large representations of the National Canners Association, National Association of Frozen Food Packers, National Dehydrators Association, and the National Preservers Association.

Government agencies represented

included the War Production Board, Office of Price Administration, Agricultural Marketing Administration, Army Quartermaster Corps, Selective Service System, U. S. Employment Service, and others.

Over two score government men did most of the talking at sessions held mainly behind closed doors or "off the record." Running throughout the three-day discussions was the problem of how to process the vast quantities of food demanded for military and lend-lease purposes, as well as for civilian needs, and do it with the limited labor, materials and equipment available.

That the job will be done, no one questions. In the doing of it, however, there will be considerable dislocation of customary operations in food processing channels and label lithographers must be prepared to encounter some disturbing jolts along with the rest.

The situation, as canners and label manufacturers must face it, has been precipitated by three conservation orders issued in December by the War Production Board. These were explained in detail to the food processors at their Chicago conference. Order M-81 controls the use of tin, terneplate, blackplate, etc., for food containers. Orders M-86 and M-86-e fix the percentages and quotas of the 1943 food packs that must be reserved for government use.

Shortage of tin, which is, of course, well understood, explains the reason for Order M-81. Scheduled under this order are 58 items, covering fruit and fruit products, vegetables and vegetable products, dairy products, fish and shell fish; 12 meat and meat products items and one group of miscellaneous foods for babies.

In the first two classes, fruits and vegetables, containers are, with a few exceptions, limited to three sizes.



Here is part of the story of reduced label volume, but only part. The label at top is from a No. $2\frac{1}{2}$ tin can. Below it is a label from the identical product packaged in a No. $2\frac{1}{2}$ glass jar. The lower label conserves paper but reduces press work. Transparent package eliminates need for full color appetizing illustrations. More and more products will appear in glass containers. More important to label houses is the complete disappearance of many consumer canned foods from food dealers' shelves.

No. 2. No. 2½ and No. 10 cans. Specifications for can sizes in the others are too detailed to summarize, but in general, this outlawing of many customary can sizes means that their labels, too, will pass out for the duration.

OVERNMENT reservations of the 1943 packs, covered by Orders M-86 and M-86-e range from 19 per cent of the base period pack of grapefruit up to 100 per cent of four items, orange and grapefruit juice blended, figs, carrots and blueberries. Averaged up, the figures indicate that approximately one-half of the 1943 food pack will be bought by the Army Quartermaster Corps for its own account or that of some ten other government agencies for which the Q.M.C. acts.

All government orders must be packed in tin, so far as it remains available and at least two-thirds of the quota, but preferably the entire quota, must be in the largest can size specified, namely No. 10. Glass containers can be used only when tinplate is insufficient.

Here, again, it is apparent that, with all or most of the tin cans going to the government, many popular food products will disappear from grocers' shelves, along with the labels that helped make sales—unless canners develop substitutes for tin containers.

The switch from tin to glass during the past year has saved many food products from exile and it is understood that another WPB order is to be prepared which will make it possible to package many more products in glass containers, subject to current conditions involving necessary mechanical handling equipment and other limiting factors.

There will, of course, have to be labels on the containers shipped on government orders and it was made clear that these will have to conform to all rules prescribed by the Food and Drug Administration. Grades will be a big factor in establishment of OPA price ceilings and canners who have heretofore elected not to specify grades on the labels of their products were bluntly told to expect such an order. Label stocks on hand which do not specify grades will probably be required to be overprinted, one OPA speaker, A. C. Hoffman, director of the Food Price division, stated.

"The actual terminology or grade description," said Mr. Hoffman, in one of the open sessions, "will be optional—either such trade terms as Fancy, Choice, Extra-Standard, or Standard; or the letters. A, B and C, used by the government, may be employed." Many use both terms.

Restrictions on the packaging of (Continued on Page 61)

U. S. Camera, 1943, Shows Best Photos

PROBABLY the best portrayal of America in these turbulent years will be found in the thousands of photographs of every conceivable subject, multiplied to hundreds of millions of faithful reproductions through present day methods of lithography and printing.

U. S. Camera, 1943, just published, contains the finest of the vast quantities of photographs taken during the last year. The annual was edited by T. J. Maloney, and Lt. Comdr. Edward Steichen, U.S.N.R. was again

photo judge. Edna R. Bennett was managing editor. Duell, Sloan & Pearce, New York, is the publisher. In its 228 pages (934" x 1234") are large black and white reproductions, many spreading across two pages. A few typical examples are reproduced here and on the front cover. Advertisers or lithographers who are interested in reproduction rights on any of the hundreds of photographs shown in the book may communicate with U. S. Camera Publishing Corp.. 122 E. 42nd St.. New York.



EARLY MORNING

This early morning scene was taken by Consuelo Kanaga, who at the time was on the New York American. Exposure was 1/25th second at f/32. It was made on Eastman Ortho film.

WIND TUNNEL

Taken at Langley Field, Va., this photograph was obtained with a 4 x 5" Linhof camera with a Schneider Angulon lens on Agfa Superpan Press Film, by Robert Yarnell Richie, himself a flyer



EVERYTHING'S DUCKY

Fred H. Ragsdale caught this fine study and it's included here as a relief from the many war scenes in the volume. This was made with a view camera with an open and shut flash. Film was Super Pancro - Press



Washington Letter By Jay a. Bonwitz

ITH plans anticipating that United States war production will reach its maximum peak by mid-1943, the lithographic industry faces two major problems stemming from attainment of this goal—availability of paper and manpower.

The situation in paper will govern, both directly and indirectly, the production potentialities of the industry, and manpower likewise will constitute one of the major limiting factors in production.

Cut in the use of paper is necessitated by the manpower bottleneck in the logging industry and also as a result of the transport problems. Both of these factors have had the effect of closing down some of the mills on the West Coast, and ultimately have led to the necessity of an overall order curtailing the consumption of paper.

While the War Production Board decision to cut paper consumption will have severe repercussions on the entire printing and publishing industry, the extent of the cut itself and its effect on the lithographic industry will not be as critical as is the case of Britain. The industry in Britain was hit earlier and harder than in this country, and yet even under these conditions, a considerable amount of printing has continued there.

Indirectly, the paper cut will have its effect on the industry in that it has been indicated that plans for a specific program of curtailing production in printing and lithography have been awaiting the paper order.

Currently there is no indication as to when it will become necessary to effect a curtailment program for the industry beyond the limitations imposed by restrictions on the use of paper. Meetings for this purpose began some time ago in Washington, and at the outset it appeared that action was to have been taken at an early date. However, it is now indicated that further discussions are to be held.

It can be assumed, nevertheless, that some plan of production curtailment for less essential printed matter will be evolved, in view of the situation in paper, as well as in labor and transportation. N the question of manpower, the industry, along with other civilian industries, faces increasing loss of labor to the armed services and to war industry. Added power given to the War Manpower Commission will give greater protection to the labor supply of war industry, but will leave civilian industry to fend for itself in the matter of obtaining needed labor.

Manpower is fast becoming the most important factor in the war production picture, and indications are that there will be a crisis on this issue before the end of the year.

While there are certain difficulties for the lithographic industry in changing the employment practices developed over a period of many years, the critical situation in manpower points to the necessity of turning to other sources of manpower to make up for the losses to the armed

(Continued on Page 48)

Order restricting use of paper may affect every lithographer in the land whose volume remains near normal. Other orders restrict film and copper but bronze powder is freed for use in inks and dusting. Manpower is problem

Making Every Exposure Count

FROM long experience, photographers in photomechanical plants have complete confidence in the uniformly high quality of Kodak sensitized materials. This dependability is the vital factor in making every exposure count, in avoiding waste, and in speeding up production.

Fewer makeovers and less correction should make the curtailed supply of these essential materials go a long way



farther in terms of productive work. Order Kodalith and Kodagraph materials from your Graphic Arts dealer.





GRAPHIC ARTS
SALES DIVISION

EASTMAN KODAK COMPANY ROCHESTER, N. Y.

Shopting for U'S'A'

RUTHERFORD enrolled its skills and resources in the war program-unreservedly-preparing to devote all its efforts to whatever was directed by the government. In the transition to manufacturing war products the blueprints of its famed civilian products were swept aside. With the recent award of what is probably the largest special PROCESS CAMERA order to be placed in the graphic arts industry, RUTHERFORD is proud to be able to demonstrate its specialized skills for the government.

RUTHERFORD MACHINERY COMPANY

100 SIXTH AVENUE - NEW YORK, N. Y.

Consider War Conversion for Printing & Lithograph Plants

AN EXTENSIVE study of the possibilities of the production of war products within and as a part of present printing and lithograph plant activities has been made by the Graphic Arts Association of Illinois, and the report contains answers to questions that may concern the industry in all parts of the nation as war restrictions tighten.

During the study 38 possible war production activities were considered and of these, eight were rejected, 24 are being investigated further, and six were offered as having definite war production merit.

The study was made under the supervision of M. E. Powers, printing engineer, in cooperation with the technical staffs of the various procurement agencies of the Army and Vavy. The War Production Board was also consulted. The study has been commended by R. A. Ritter, superintendent of planning of the Government Printing Office and by William M. Passano, chief of commercial printing section of Printing and Publishing Branch of W.P.B., both of Washington, D. C.

The association's War Conversion Committee was headed by Eagle Freshwater of the Western Newspaper Union. Other members of the committee from the graphic arts trade included:

F. Armstrong, Hillison and Etten; John W. Bornhoeft, Jr., Columbia Ptg. Co.; O. E. Bull, Workman Mfg. Co.; Paul C. Clovis, Twentieth Century Press; Harry B. Clow, Rand, McNally and Co.; Oscar Daum, R. R. Donnelley and Sons Co.; C. J. Farwell, Jr., C. J. Farwell Co.; G. P. Freeland, Desaulniers and Co.; H. A. Gerlach, I. S. Berlin Ptg. and Litho. Co.; Morton Kallis, M. Kallis and Co.; John S. Kurtz, Cornelia Ptg. Co.; R. A. Levin, R. A. Levin and Co.; H. Barry McCormick, McCormick and Henderson: F. D. McManus, Lincoln Ptg. Co.; Geo. F. McKiernan, Geo. F. McKiernan and Co.; Harry O. Owen, C. O. Owen and Co.; Burton C. Polglase, American Colortype Co.; H. C. Sherman, H. C. Sherman and Co.; Bernard Snyder, American Typesetting Corp.; P. L. Tallman, Tallman, Robbins and Co.; P. S. Thompson. Geo. G. Renneker Co., and John J. Moher, and S. F. Beatty. of the association.

Those war jobs which were selected as possibilities made use of skills and

equipment found in die cutting, bindery, packing and shipping operations. They were described as follows:

The Packing of Army Ration D

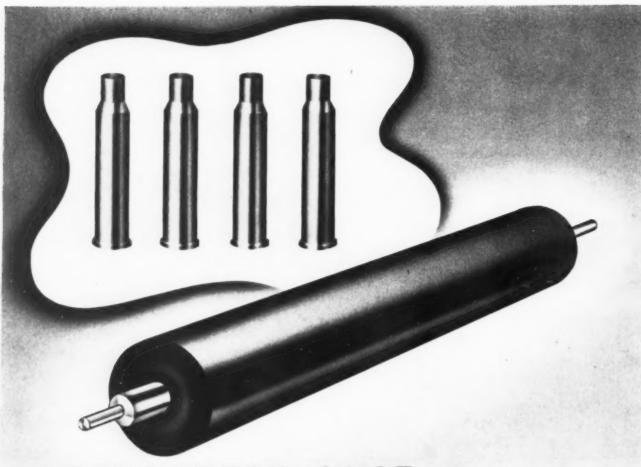
It involves the actual packing operations, the handling of a large quantity of materials, considerable purchasing effort and of the greatest importance, the delivery of the completed order in a very limited time period. The ration consists of a special chocolate bar enclosed in a heat-sealed cellophane bag, inserted into a carton and the carton dipped in paraffine. These units are then grouped in a master carton and the master cartons packed in a wooden shipping box. The study of the packing of this ration was made in the bindery of one of the members of the association who kindly cooperated and cleared floor space for the experiment. A small scale packing unit was set up and various methods tried out to determine the most efficient plan to follow. Time study was used to check comparative value of the methods. This data was then used in working out the possible costs and other problems of the contract.

Some of the highlights of this packing study will be of interest. Most of the orders are based on units of one million rations. An order of this size will require some 100 skids for storage and handling, weighs about 150 tons boxed for shipment, and involves the purchase of some 250,000 pounds of chocolate bars. Two shifts will be necessary in order to meet the rigid delivery requirements. The final steel strapped shipping box is a very sturdy unit that can stand a lot of rough handling.

The packing of this ration is now largely a machine operation. Machines are used for the cellophane wrapping, inserting and sealing of the cartons and the dipping of the cartons in paraffine. Any bidder for the packing of this ration would have to stand

(Continued on Page 51)

Illinois association makes first extensive study of possibilities of utilizing graphic arts skills and equipment for conversion to certain types of war production activities



ACCURATELY CAST AND UNIFORM IN QUALITY

Like the soldier who must have confidence that every bullet fired will perform equally well, the pressman, to get his best production, must know that the rollers he uses are uniform in quality.

Pressmen select Bingham's SAMSON (Vulcanized Oil) or Bingham LITHO-PRINT (Rubber) Offset Rollers because of their known dependability. True and round, smooth and tough, they cover evenly, use minimum ink, and permit high running speed. They are economical.

Whatever your roller requirements, consult the Bingham roller representative near you. Any one of the sixteen Bingham factories will give you prompt service.

SAM'L BINGHAM'S SON MFG. CO.

Manufacturers of Printers' and Litho-Offset Rollers

CHICAGO

Atlanta Cleveland Dallas Des Moines Detroit Houston Indianapolis Kalamazoo Kansas City

Minneapolis Nashville Oklahoma City Pittsburgh St. Louis Springfield, O.

Order 10% Cut in Use of Printing and Book Paper

THE use of paper for commercial printing and book printing was brought under control by the War Production Board January 8 with the issuance of several orders and amendments vitally affecting graphic arts operations during 1943.

The preliminary announcement explaining Limitation Order L-241, stated:

During any calendar quarter of 1943 a printer may put paper into production only according to one of the two following schedules:

- 1.) Not in excess of 22½ per cent of the gross weight of paper used by him during the base period, 1941.
- 2.) Not in excess of 90 per cent of the paper used by him during the corresponding calendar quarter of the base period.

In neither case is a printer permitted to use paper during the year 1943 in excess of 90 per cent of the entire base period. Printed matter as defined in the order means any paper with ink applied to it by any of the graphic arts processes. "Put into process" is defined as meaning the first application of ink to paper in the production of printed matter.

Exempted from the order is the printing of newspaper, wall paper, boxes, converted paper products, magazines and books, use of paper for these products being governed by various other limitation orders and a conservation order. Also exempted from the order is printed matter produced by or for the account of any department or agency of the United States, or any state, county, or municipality in the United States. The Printing and Publishing Division of WPB points out that in calculating their paper consumption in the

base period. all printers should be careful to subtract from this calculation the paper they used to produce any of the products or for any of the uses listed as exempt.

The amount of print paper book publishers may use during 1943 was limited to 90 per cent of the tonnage of paper used by each publisher during 1942, by Limitation Order L-245, also effective January 8.

Restrictions are also put into effect on paper for reprinting. On and after January 8, publishers who wish to reprint books are required to reduce by 10 per cent the weight of paper used in each copy of the book as last printed prior to January 8.

There are, however, two exceptions to this provision. The first exempts books the last printing of which occurred before the effective date of the order, January 8, when such books were printed on paper of a 40 pound base weight. The second exempts books, the paper for which was ordered prior to January 8, and is scheduled for delivery to, or for the account of the publisher within 45 days after January 8.

All persons affected by the order are required to keep, for not less than two years, accurate and complete records concerning inventories of paper and books, and the production and sale of books.

Issued simultaneously with the above orders, was Conservation Order M-241-A, curtailing the amount of paper that may be used by converters in the manufacture of converted paper products. A converter is defined as any person engaged in the business of manufacturing from pulp, paper or paperboard, any of a number of articles listed in the order. The

order sets up two lists, A and B. each enumerating a number of paper products. Paper, including pulp and paperboard, may not be used for list A products in amounts ranging from 50 to 110 per cent of the amount used in 1942. This list includes a variety of articles from envelopes to paper towels. On and after February 15. however, no converter is allowed to use any paper at all in the manufacture of any of the articles on list B. Typical B products are albums, coasters and mats, doilies, and tray covers.

Prior to the issue of these orders, L-240 and L-244 were issued reducing the amount of paper that can be used by newspapers and magazines by 10 per cent.

ALL of the foregoing orders deal with the use of paper. The method of controlling the production of paper was changed January 8 by a sweeping amendment to General Conservation Order M-241. Under the previous form of the order, the production of paper and paperboard was running at the rate of approximately 3,800,000 tons per calendar quarter, as the total for all types. Under the order, as now amended, production of the tonnage permitted for the first calendar quarter of 1943 is estimated to be approximately 4.-100,000 tons, an increase of eight per cent.

This increase is required in order to permit expanded production of those grades containing waste paper and other non-fibrous material. It is only a temporary measure to allow increased production in those grades pending balancing reductions in other grades. Grades containing waste were assumed in the trade to mean chiefly paperboard.*



BLACK CAT...BAD LUCK?

Not on Du Pont "Photolith" Film!

Copy like this doesn't have to mean "bad luck" in the darkroom. You can hold the soft tones, build up the deeper ones . . . with du Pont "Photolith" Film.

You keep all the qualities of the original since you get sharp, hard dots with "Photolith." The dots have extra snap because of their contrast with the crystal-clear safety film base. When it's desirable, you'll find it simple to build up density with development or to reduce the sturdy dots to pin-point size without breaking them up when etching.

Whether you're after quality or quantity, you'll like the ease and speed with which du Pont "Photolith" Film can be worked. "Bad luck" won't cross your path!





Sheet film in convenient "Lite-Lok" box. Roll film in non-scratching dispenser box. E. I. du Pont de Nemours & Co. (Inc.), Photo Products Dept., Wilmington, Del.



PHOTOLITH FILM

Better Things for Better Living . . . Through Chemistry



By I. H. Sayre
Technical Editor

T IS often difficult to reverse continuous tone negatives, particularly if the emulsion is a thick one. The difficulty seems to lie mainly in the fact that most operators completely fog and re-develop the emulsion. If the second exposure or fogging is controlled, better results will be obtained, and in fact, it is difficult to distinguish a reversal print from a contact positive.

The first development should be made in a red light of course. The procedure is roughly as follows: Make a normal continuous tone negative in the camera and develop about four and one-half minutes in the following developer at 65° F.

lowing developer at 05 1.
Developer
Water 64 ounces
Elon
Sodium sulphite
Hydroquinone
Sodium carbonate3-1/5 ounces
Potassium bromide 22 grains
After development, the plate is
washed for about 30 seconds in run-
ning water and the developed image
is bleached out by immersing in re-
versing solution made as follows:

	Rei	e	rsa	ıl	4	5	0	li	ı	ti	O) }	ı		
Water								,						80	oz.
Sulphu	ric	a	eid	١.									0	1	OZ.
Potassi	um	b	ich	r	0	n	lá	1	€	0				1	oz.

This should take about two minutes and it is most important that this bath always be fresh. The plate is then

washed again for 30 seconds in running water and swabbed with cotton if there is any sediment on it. Next the plate is washed in a 5 per cent solution of potassium metabisulphite for another half-minute, washed for one minute and put back into the original developer for about 30 seconds. After this the plate is given a quick rinse in fresh water, re-exposed immediately (and while still evenly wet all over) for about five seconds to a 40-watt Mazda lamp at a distance of three feet. To keep the emulsion evenly wet during the second exposure, merely drain off the water in the rinsing tray, and while the plate is resting on the bottom of the tray, hold the lamp above it for the exposure. The plate is now re-developed in the first developer. This takes about two and one-half minutes and should be varied according to the contrast desired. If the positive appears too contrasty during development, it can sometimes be saved by giving a very short supplementary exposure to the glass side of the plate. The plates are fixed and washed in the usual manner. These reversals are well worth trying, and a little experimenting will soon accustom the photographer to making them with consistently good results.

If the first exposure in the camera is too long, it will cause a loss of highlight tone in the final positive. Of course, if the original copy is grey in the highlights, the positive taken from an increased first exposure will brighten the highlights. A long second exposure will run the shadow detail together, and a short development will produce contrast. A full range of tones is only obtained by giving a reasonably short second exposure and a good re-development.

The metabisulphite bath produces improved highlight tones. Line work can be reversed in the same way as continuous tone originals by using process plates and D-85 developer. Plates having no anti-halation backing show less tendency to stain in D-85 when reversing by this process.

Overlays for Color Separations

Overlays of one kind of another have been used for many years. What is related here is merely an enlargement on this old idea.

A piece of Eastman Acetate Sheeting .005 thick is tacked down at the corners with Scotch tape, the register marks on the original copy traced off with India ink and the first color traced with opaque. This is repeated for as many colors as the copy contains, laving each succeeding sheet on top of the previous one until all the sheets are registered one above the other and the colors blocked out with opaque. Where one color combines with another as blue and yellow to make green, for example, both yellow and blue are blocked out on the blue overlay as well as the yellow overlay. When the copy is photographed, the photographer merely places a white paper under each overlay and shoots them individually or in combination as the work demands.

Line and halftone work may be combined on one negative in much this same way. The halftone is covered with an overlay sheet which may be blocked out with opaque or a piece of red cellophane. The halftone negative is first made, then covered with the overlay, and the line work unmasked and exposed. This method

THE LESSON YOU LEARN FROM DIVENCE

ADENA HALFTONE OFFSET



First—a strong, white stock that "delivers the goods" in any direct mail campaign or for many other purposes.

Second—always dependable and always reasonably priced.

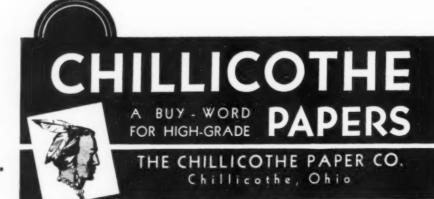
Remember, experience is a good teacher . . . take advantage . . . avoid the costly lessons you learn from *experiments*.



Save money by shipping via Miami Valley Shippers' Assn.

Greeting Card Papeterie...

Embossed and Decorated



MAKERS OF QUALITY OFFSET, LITHOGRAPH AND BOOK PAPERS

is only used where halftone copy may be trimmed and placed in the layout.

Ortho Halftone Films

Some tests were made at our shop the other day on several kinds of film to predetermine their working characteristics before issuing instructions on their use. Our general observations are herewith set down for your further investigation. The film used was Eastman Kodalith. Agfa Ansco Reprolith, and Dupont Photolith. Each film was cut in three parts after exposure, and each part developed simultaneously in three different developers. The exposure time and development time were kept constant at first and then adjusted to suit the needs of each film.

The developing solutions were Eastman's formula D-85. Improved Kodalith Developer, and Gevaert GD 190. We used double arc 35 ampere lights set at a 45 degree angle, five and one-half feet from the center of the copy board, a 42 inch lens, and a good piece of copy with light and heavy lines in black as well as several different colors very evenly distributed. With processing adapted to the peculiarities of each film, very good results were obtained on all emulsions.

First a piece of Kodalith film was exposed for 20 seconds, cut into three pieces and developed for 11/2 minutes. The D-85 development was very satisfactory, but Kodalith Improved Developer was slower in action as was GD 190 and both films from these solutions were underdeveloped. Another exposure was made and development time increased to two minutes which produced good results. GD 190 acted very much like a continuous tone developer, picking up color and shades of gray very well. This may or may not be desirable, depending upon what the photographer wishes to retain of the original copy and what he wishes to lose. What we saw from this developer led us to believe it would be an ideal developing solution for rephotographing a halftone which was printed either in color or black and white ... and

this proved to be true. It was excellent for making a direct copy of a magazine cover which had been printed in four color process, for example. It further showed a truer reproduction of fine and heavy lines than either of the other developers, holding sharp clean-cut edges up to a ten times reduction. The addition of citric acid crystals to this Hydroquinone developer produces a very fine grain resolution. The small bars and figures of a testing chart were still sharp and clear when reduced ten times.

Tests on the other films showed the same general results as with Kodalith.

We next tried a piece of Photolith film, giving it also a twenty second exposure and 11/2 minutes of development. It was considerably overexposed, so the next exposure was made at ten seconds with good results. This film seems to react less favorably to Kodalith Improved Developer than to D-85 or GD 190. Improved Kodalith Developer in all instances required slightly more developing time. GD 190 produced much detail but did not drop out tints. This is usually desired when orthochromatic film is used. No attempt was made to use filters in these tests, however. Kodalith developer produced good contrast, but did not drop out tints as well as D-85. It also showed a tendency to produce an amber color in the film when development was prolonged. It will be noted that 50 per cent less exposure time was needed for Photolith than for Kodalith film.

The next test was made on Reprolith film again with twenty seconds exposure and 1½ minutes development. It was considerably underdeveloped in all three developers. An increase of 75 per cent in developing time was needed to produce good results. The Reprolith film shows high contrast, can be developed up to five minutes if necessary to obtain more density in the background without fogging the image. We would especially recommend this film where very poor copy is used having a discolored background. A

suitable exposure may be given, with reference to detail, and the development pushed until sufficient background density is obtained.

These films were all regular base films. A Kodalith film with a base especially suited to topographic work was also used with results somewhat better than the regular base. This film holds its exact dimensions very well and is quite satisfactory for topographic work. Photolith film is faster and shows a slightly greater resolution than the other two with both D-85 and GD 190 developers.

Some interesting things can be done with GD 190. Try it on planographic shots if you are not acquainted with it, and then try it on half-tones to see what it does to the middle tones. The formula is as follows:

GD 190

Water (125° F.) 64 oz.
Potassium Metabisulphite 1 oz.
Sodium Sulphite 4 oz.
Hydroquinone 3 oz.
Sodium Carbonate 8 oz.
Citric Acid Crystals 75 grains
Potassium Bromide180 grains
Water to Make128 oz.

Image Spreading on Bond Stock

The question has been asked: "Why does the image always spread when I print on bond stock? I don't have this trouble when using other papers."

There are a number of factors which might produce a spreading image on bond stock, and lacking a sample of the print, we can only suggest the probable cause of the trouble. Usually a somewhat softer ink is used and in attempting to mix an ink which is suited to the surface of the paper, it is reduced too much with various dopes. Too much pressure, too much water, and too much dope in the ink will all cause the image to spread. An embossed blanket from cobalt drier might be the cause also. If under a magnifying glass the image on the plate still appears sharp, the ink may be emulsified from too much water or may be reduced too much. This combined with an absorbent paper surface will print a heavy image.★★



not news, but down-to-earth information

National Association of Photo-Lithographers 1776 Broadway, New York, N. Y.

Dear Mr. Soderstrom: I am interested in knowing more about your work. Our press equipment is:

No. Size Make

Firm Name

Executive

Address

City and State

Members of the NAPL periodically receive helpful NAPL bulletins. This information is prepared for ring binder filing for ready reference. The NAPL sifts out the avalanche of orders issuing from Washington and comments on those affecting our members. Much of our Bulletin is given over to information on WPB, OPA, ODT, the Manpower Commission and other Governmental Agencies. Occasional data sheets are released on Labor, Hours and Wages, Trade Practices, Costs and Estimating, Selling, Production Problems, Copyrights and Management. The NAPL Bulletin is not news, but rather down-to-earth information to help our members with their selling, production and management problems.

IN AND ABOUT THE TRADE

To Display Offset Books

A COMPREHENSIVE collection and exhibit of a wide variety of lithographed books under the title "Books by Offset" is being organized under the sponsorship of the Trade Book and Textbook Clinics of the American Institute of Graphic Arts. According to present plans, which are still in the formative stage, it will be a jury show and will open in New York late in March or early in April.

Other openings may be held in other cities simultaneously, it was said. Following these opening shows. the exhibit will tour the country.

Organizations representing employers and employees in the lithographic industry have volunteered to help back the project. A number of supply firms have already agreed to help sponsor "Books by Offset."

George H. Carter is chairman of the exhibition committee. Other members are Walter E. Soderstrom. National Photo-Lithographers Association; Alicia P. Yasinski, Macmillan Co.; George Hornby, Thos. Y. Crowell Co.; W. Floyd Maxwell, Lithographers Natl. Assn.; Henry Cole, S. D. Warren Co.; and William B. Marsh, Wm. E. Rudge's Sons, all of New York.

Winsor to St. Louis Group

Fred E. Winsor, who was formerly national account executive in St. Louis for Outdoor Advertising, Inc., is to manage the office of Associated Printers and Lithographers in that city.

White, LNA, in Navy

Stanley C. White, cost engineer of the Lithographers National Association, New York, has been granted a leave of absence to serve in the United States Naval Reserve. He was commissioned a Lieutenant (Senior Grade) and has been assigned to active duty in Cincinnati. He had served with the association since 1936. For some time Lieut. White



had been a member of the United States Coast Guard Auxiliary spending one day a week in patrol work.

Abandon LTF Clearing House

The organization of a Clearing House for Emergency Lithographic Problems which was considered recently by the Lithographic Technical Foundation will probably not be carried out according to word from the Foundation. The plan was announced at the proposal of a number of persons in the industry with the purpose of helping lithographers to meet the many production and technical problems brought on by the war.

A spokesman for the Foundation said. "After securing the approval of a number of representative lithographers, this plan was published in the trade journals for October and November (Modern Lithography-October, page 50), with the request that all interested in cooperating write the Foundation to that effect. Few replies have been received, probably indicating that economic problems have taken precedence over technical problems, at least for the time being."

Order Stops Manufacture of Printing Machinery

NO new printing machinery may be manufactured for commercial use after January 30, and manufacture of replacement parts will be limited, under an order issued January 4 by the War Production Board. Only exception to the order will be machinery manufactured for shipment to armed forces operating outside of the United States. Under the order, replacement parts may be obtained only by turning in old ones. This latest order revises previous restrictions designed to conserve critical

High priorities are retained for the manufacture of supplies and replacement parts, but a manufacturer's output of replacement parts is limited in

dollar value to 120 per cent of the amount produced in 1941. This value is permitted only in cases where a manufacturer does not already have more than a four months' inventory of such parts. Rate of new manufacture for firms having such inventories is 72 per cent of the 1941 level.

Similar limits were set for operating supplies, but the manufacturer's limit is 72 per cent of the 1941 production, providing not more than four months' inventory is held. If the inventory is larger, then 24 per cent is the limit.

Manufacturers are also ordered not to sell new parts or supplies to any person unless the old part is turned in or is sold for scrap.

SERVICE PLUS QUALITY!

HAS MADE OUR PLANT THE WORLD'S LARGEST

WE SPECIALIZE IN SMALL PLATES
ALSO REGRAINING MULTILITH

ZINC and ALUMINUM PLATES UNGRAINED-GRAINED-REGRAINED



Lithographic Plate Graining Company

37-43 Box Street-Brooklyn, N.Y.



THESE VITAL LITHOGRAPHIC NECESSITIES ARE AVAILABLE DIRECT FROM US OR FROM OUR DEALERS — promptly

CHAMPION Albumen Concentrate

B.P.B. (Albumen) Solution (Ready-to-use)

JIFFY Developing Ink

JIFFY Heavy Developing Ink (for deep etch)

TRANSOL Developing Ink

LITH-VILO Plate Etch

DR. ZUBER'S PLATE ETCH (dry salts)

IMPERIAL Fountain Solution Concentrate

GUM ARABIC Solution

SOLIO-Self-Gumming Agent, for use in the Fountain

SAV-A-LAC Intensifier (Purple)

GRIPTITE Intensifier, apply direct to Coated Plate

GRAPH-Black Opaque

VELVO-Red Opaque

NEGATIVE STAIN—Black or Red

Liquid TUSCHE

DUMORE Asphaltum-Plate Preserver and Wash-out

MULTILITH OPERATORS — send for our catalogue of preparations for Plate-Making and Press Operations, etc. — FREE

LITHO CHEMICAL & SUPPLY CO.
63 PARK ROW NEW YORK, N. Y.

Nypen Contest Closes, Announce Winners Soon



A variety of patriotic themes are shown by these typical contests entries.

ENTRIES in the Nypen Patriotic Slogan Contest, representing nation-wide distribution of over 22,000,000 printed pieces, testify to the contribution that printing and lithography are making toward the winning of the war, according to the New York and Pennsylvania Company, sponsors of the Contest. Entries have been received from practically every large printing center in the country and from patriotic printers and lithographers in every bracket of production. "The contest entries make an interesting cross-section of the

work being done by the graphic arts to maintain wartime morale and to spur on war production." president Eustis Paine of the New York and Pennsylvania Co. stated. "There is no doubt, after seeing this collection of wartime printing, that the graphic arts has a war job to do and is doing it."

Final entries in the Contest were presented to the Board of Awards just before Christmas. Announcement of prize winners will be made during January and war bond prizes totalling \$1.000 will be distributed.

Lieut. Goes Marries

Second Lieut. Arthur Goes, Jr., son of Arthur Goes, president of Goes Lithographing Co., Chicago, was married Dec. 12 in Alexandria, Va., his bride being the former Miss Clarabell Grossman of Chicago. Due to the press of holiday business, President Goes was unable to attend, but the groom's mother was present with relatives of the bride. Lieut. Goes had

received his commission a few days earlier, following completion of a training period in the Engineering Corps' litho school at Ft. Belvoir, Va

Reprint Litho Manual

A reprint edition of *The Lithogra*phers Manual is now in production and is to be issued during January, Walter E. Soderstrom, announced. The reprint was made necessary because present copies of the second edition have been exhausted due to its increased use by the U. S. Armed Forces as text material for training men in lithographic work, Mr. Soderstrom said.

The manual is offset, 8½" x 11" and contains nearly 400 pages. It contains information on every phase of lithographic operation, as well as summaries of trade practices, advertising and publishing information. and outlines of the activities of various organizations within the industry. The manual is priced at \$5.00 per copy, and may be ordered through this magazine.

Vulcan Drops Rollers

Vulcan Proofing Co., Brooklyn, N. Y., has discontinued the manufacture of rollers for the duration of the war, according to an announcement from the company. However, offset blankets will continue to be produced by the firm.

The discontinuance of rollers, it was explained, was to allow the company to devote its facilities and materials to its war production program. "Just as soon as peacetime production is resumed," a company spokesman said, "greatly advanced Vulcan rollers will be available to lithographers. Vulcan has earmarked many of its important new discoveries for use in making peacetime rollers."

Quaker Buys Karl Gut Firm

Quaker State Lithographing Co.. New York, has recently purchased the Karl Gut Litho Co., same city. Karl Gut, head of the firm which bore his name, will continue as vice-president and consultant of Quaker State although he will not be as active as in the past, it was said. Most of his attention will be devoted to the production of a series of 50 bird paintings in nine colors or more which are being done for the National Audubon Society. Mr. Gut began his career in the lithographic business 53 years ago as an apprentice in Zurich. Switzerland, and came to this country in 1893. G. A. Muenzer is president of Quaker State.

0 SERVICE HINT Keep light level at its peak by cleaning reflectors periodically.

Carbon Arc Lighting saves Time and Material at the Copy Board

• In these days of world-wide conflict, time and materials are at a premium. Neither can be wasted. The carbon arc conserves both for the lithographer.

The sturdy construction of carbon are equipment with its constant output of high intensity snow-white light is appreciated more than ever in these times by users of this equipment. From the time the arc is struck it emits a light of uniform color quality and intensity. This greatly simplifies the lithographer's technique. Length of exposure is kept at a minimum and plate spoilage from over or under exposure due to light change is averted. A reliable technique based upon constancy of radiation is never disturbed by changes in quality or intensity. Exposures made today can be duplicated a year from today with the same results.

You can rely upon your arcs for uniform, high quality work in both black and white and color reproduction.

USE NATIONAL WHITE FLAME PHOTOGRAPHIC CARBONS-THE LIGHT OF DAYLIGHT QUALITY



NATIONAL CARBON COMPANY, INC. Unit of Union Carbide and Carbon Corporation

Carbon Sales Division, Cleveland, Ohio
General Offices: 30 East 42nd Street, New York, N. Y.
Branch Sales Offices: NEW YORK - PITTSBURGH - CHICAGO - ST. LOUIS - SAN FRANCISCO

A Dependable Source of Supply

SINCLAIR & CARROLL CO., Inc. OFFSET LITHO INKS

> 591 ELEVENTH AVENUE, Tel. BRyant 9-3566 NEW YORK CITY

CHICAGO 440 W. Superior St. Tel. Sup. 3481

LOS ANGELES 417 E. Pico St. Tel. Prospect 7296 SAN FRANCISCO 345 Battery St. Tel. Garfield 5834 NEW ORLEANS 211 Decatur St. Tel. Magnolia 1968

WPB Releases Existing Bronze Powder for Use

BRONZE powder for use in pastes, inks and dusting powders for lithography and printing was released for use by the trade by action of the War Production Board effective December 28. An estimated half million pounds of bronze powder and bronze powder products were thus made available for uses which were to have been prohibited after December 31. Unlike previous orders covering this product, no date limit was set on this order. This was taken in the trade to mean that no further restriction is contemplated. The release was based

on inventories as of March 31, 1942.

This action, Copper Order M-9-c-3 as amended by the Director General for Operations, was taken because all inventories usable by the Army and Navy have been purchased by the Services. The material released is unsuitable for any war or essential civilian purpose, but is usable for printing, publishing and decorative purposes. The restriction on the manufacture of additional bronze powder for decorative or other non-essential purposes, of course, is continued in effect.

Labels for Canned Foods Promote Tin Salvage





The labels shown above are examples of the promotion for salvage of tin cans in which label manufacturers are cooperating.

SIMPLE instructions for the salvaging of tin cans for their metal content are being publicized through the labels placed on food containers, according to the Label Manufacturers National Association. Many canners are accelerating the movement by placing patriotic colors and slogans on their labels. "The value of a lively reminder in the kitchen, at the time of emptying the can, needs no argument," the association's announcement stated. This plan was endorsed by the association's members at their annual meeting in November. There

are no restrictions on the designs (shown above), but the words and instructions, if different from those shown, should be approved by the Conservation Division of the War Production Board, 1100 H. St., N. W., Washington, it was said. Additional information may be obtained from Charles Cosby, secretary of the Label Manufacturers Association at 1700 Eye St., N. W., Washington.

Holidays Slow Activities

Organizational activities of Chicago lithographers were slowed up last month due to the Christmas season. An informal good fellowship meeting for members only was arranged by the Lithographers Club, Dec. 18, but both the L.N.A. and N.A.P.L. groups passed up regular December gatherings.

Strathmore Elects Officers

Horace A. Moses has just been elected to the newly created position of chairman of the board of the Strathmore Paper Co., West Springfield, Mass. John D. Zink was elected president and as new vice presidents. G. E. Williamson, Arthur E. Shattuck and F. Nelson Bridgham were named.

Mr. Moses is the founder of the Strathmore company and for fifty years has directed its activities, for 45 years as president. He also has many outside business and civic interests. Among them he serves as president of Rising Paper Co.

Mr. Zink joined Strathmore Paper Co. as vice president in 1933, retaining his previous presidency of Old Colony Envelope Company at Westfield, Mass.

Send Checks to the Fronts

Edwards & Deutsch Lithographing Co., Chicago, has adopted a scheme for building morale among former employees now in the armed services. Once each month, since the first man was called up, each soldier or sailor receives concrete evidence that the home folks have not forgotten him, this taking the form of a check from the company for what is described as "a modest sum." There are now twenty-seven names on E. & D.'s Honor Roll and the checks are finding their way into every corner of the globe.

Boro Offset Celebrates

The Grand Ballroom of the Towers Hotel, Brooklyn, N. Y., was the scene of the seventh annual Christmas Dinner of the Boro Offset Corp., that city, December 19. Attending were 240 employees, customers, supply men, and as special guests, a number of Naval Ensigns from nearby Floyd Bennett Field.

150 Attend New York Photo-Lithographers' Party



THE dining room of Cavanaugh's Restaurant, New York, was the scene of the sixth annual Christmas party of the New York Photo-Lithographers Association, December 17th. Music and novelty musical entertainment was furnished by the Red Jackets during the serving of the

steak dinner and throughout the evening. Nearly 150 members and guests of the association attended. Walter E. Soderstrom, executive secretary, was in charge of arrangements, and 33 supply firms and trade publications were listed as contributors to the party.

Chicago Craftsmen's Club Studies Rollers

CHICAGO lithographers and printers who attended the "Roller Night" meeting of the Chicago Club of Printing House Craftsmen, Dec. 15, were given an impressive demonstration that there is a rubber shortage, although not yet for press rollers.

George Skach, of the H. J. Schultz Litho Co., who is chairman of the Club's Exhibits Committee, had planned a large display of leading lines of rollers of all makes and thought he had everybody lined up to do his part in providing the necessary props for the show. But when the Craftsmen got there, "the cupboard was bare." Not a roller had been sent around. Seeking an explanation for the big gap in the stage settings for the meeting. Mr. Skach was told that "It's the war." The well-known rubber shortage, it seems, is forcing roller manufacturers, like everyone else, to conserve delivery truck tires. Chicago's

icy streets were at their worst that night and manufacturers had deemed it wise to keep their trucks at home. The Club meeting thus had to get along without visual evidence of the evening's subject matter.

There was the universal agreement, however, that the roller meeting was one of the most helpful in the Chicago Club's history. Arranged on the "Information, Please" model, the panel of five experts included the following: Don E. Crews, of Samuel Bingham's Son Mfg. Co.; H. L. Ditzler, American Roller Co.; Ben T. Nilles, Rapid Roller Co.; Harry Dickson, Ideal Roller & Mfg. Co.; and Harry J. Hunt, Dayton Rubber Mfg. Co.

Each speaker was allotted ten minutes to present his own ideas and club members were then given opportunity to let the roller makers know what printers and lithographers don't like about rollers of every type, offset blankets and the rest of their rubber equipment. It was all a friendly fracas, with perhaps the most spirited debate centered on the question "What's the ideal roller for specific jobs?"

The five speakers were agreed that, in view of prevailing conditions, all pressmen must take extreme care of their rollers. They were far from pessimistic about the future, however. Although admitting that, when it comes to truck tires, there is a definite rubber shortage, they assured their hearers that the roller industry will be able to meet all demands for some time to come. After that, they declared, "It depends on Washington."

Join Chicago Craftsmen

Joseph Dittmeyer, foreman of the shipping department of the H. J. Schultz Litho Co., Chicago, was initiated into the Chicago Club of Printing House Craftsmen, Dec. 15. In the same class of initiates also were Walter C. Durlak, branch technician of the Geo. H. Morrill Co., division of G. P. I., and Charles C. Wene, manager, envelope department of the James White Paper Co. Other recent additions to the Chicago Club's membership roll include Edw. G. Koenig. litho pressroom foreman, American Offset Corp.; Hubert X. Knapp, vicepresident and general manager. Printers & U. S. Finishing Co.; Herve W. Surrey, production superintendent and treasurer, Roberts & Porter, Inc., and Robert W. Grubbe, technical adviser, Harold M. Pitman Co.

Olsen Killed by Auto

Alfred F. Olsen, office manager of the Stationery Mfg. Co., Chicago litho house, was killed when struck by an automobile, Dec. 20. Mr. Olsen, who was 53 years old, had attempted to hail a passing motorist to ask assistance in starting his car which had become stalled in the dark on a rural highway.

Johnston Advances Strobridge

John B. Strobridge has become sales manager, secretary and a member of the board of directors of the Johnston Paper Co., Cincinnati.

Chicagoans Aid Drive

Chicago lithographers made an excellent record in that city's current drive for contributions to the Chicago Community Fund. Up to Christmas eve over \$5,000 had been collected from the industry with additional pledges to be turned in later. according to Cecil Pickard, production manager of Newman-Rudolph Lithographing Co. and chairman of the committee which solicited donations from lithographers. This sum, he said, was almost 10 per cent of the amount paid in by Chicago graphic arts houses to that date. It was collected, he pointed out, despite competition from war bond sales campaigns and payroll deductions.

Topping the list of donors was the Meyercord Co., which sent a check for \$1.000 from the company and an additional \$780 raised among employees. Other large contributors,

Mr. Pickard said, included Edwards & Deutsch Lithographing Co., Newman-Rudolph Co., Goes Lithographing Co., and the Harold M. Pitman Co. Several other large companies. Mr. Pickard added, had sent their checks to Community Fund head-quarters direct, before solicitation by the lithographers' committee started.

Gives Aluminum Outlook

A review of the past year's record of the Aluminum Company of America and the outlook for the future of aluminum is contained in a statement by Roy A. Hunt, president of the company. He tells of the newer methods of rolling the metal, from which lithographic press plates are made, methods which may bring lower prices after the war. Excerpts from the statement follow:

"The United States, in 1942, produced aluminum at a rate greater than

all of the Nazi-fied Europe; it is producing, probably, eight times as much of the vital warplane metal as Japan. In the year we are now entering, we should reach in this country a peak which the entire Axis aluminum production cannot hope to achieve.

"One sheet mill, located in Tennessee and built in record-breaking time, has capacity to roll sheet fifty times as fast as it could be rolled two years ago.

"Alcoa has not forgotten its civilian customers during the war period in the realization that they are cooperating by doing without aluminum they badly want so that the metal can go into planes, ships, and bombs. After the war the metal will again take its place in the many civilian products for which it is suited."

New York Litho Club to Elect

The annual business meeting and election of officers is planned by the New York Litho Club for Wednesday, January 27, at the Building Trades Club, 2 Park Ave. At that time the nominated slate of officers, already announced, will be up for election. William H. Carey, Sweeney Lithograph Co., holds the nomination for president. No ladies' night will be held by the club this year, it was announced.

At the club's annual Christmas Party, held at the Building Trades Club December 16, 150 lithographers and allied tradesmen met for dinner and a varied program of entertainment. Highlight of the evening was the impromptu performance of Sgt. Frank S. and Hammond Sullivan, twin brothers prominent in the New York trade, who sang, played their own piano accompaniment and furnished a running routine of dialogue. Sgt. Sullivan is on leave of absence from the Sweeney company and is serving as camera instructor in the 31st Engineers, Fort Belvoir, Va. Hammond is with Woodrow Press. Both are brothers of Walton W. Sullivan, Tooker Litho Co., secretary of the club.

Donnelley Dispute May Involve Offset Work

LONG-STANDING conflict between printing craft unions and R. R. Donnelley & Sons Co., reached the showdown stage last month when union printers refused to handle work they claimed had been sub-let by the Donnelley organization to the Cuneo Press and other shops in Chicago and Philadelphia. The boycott involved several magazines of large national circulation, mail order catalogs, telephone directories and similar jobs.

Explaining the work stoppage, N. M. Di Pietro, international representative of the Typographical Union and secretary of the Chicago printing trades Council, said, in a statement: "We will not permit union plants to be used as auxiliaries to the Donnelley Company until such time as the company agrees to accept the same terms and conditions as union employers." He denied charges by union shop employers that his men were violating their contracts. Nothing was said about Donnelley's oft-repeated offer to permit an election, which the unions have as often refused.

The dispute was referred to the

War Labor Board which set up a three-man board to investigate. Employers involved denied that their plants were being used temporarily to handle Donnelley's overflow work. An agreement was then made to end the work stoppages and further action was deferred to a later date.

Although nothing but letterpress work was involved, the dispute is being closely followed by lithographers in Chicago and elsewhere. If the letterpress unions succeed in entering the Donnelley plant, it is anticipated that they might establish their right to control lithographic as well as letterpress operations there. This would serve as an opening wedge in the age-old effort of the letterpress unions to assert their claims to jurisdictional control of lithographic workmen, it was said, a claim which is stoutly opposed by the Amalgamated Lithographers of America. Authorities in touch with the Chicago situation agree that further conflict would then be inevitable, especially in the combination shops in Chicago and other large lithographic centers.

WASHINGTON LETTER

(Continued from Page 28)

services and to war industry, which obviously is in a position to offer higher wages than the lithographic industry.

Women constitute the largest single reserve of labor, and while the long training period for lithographic pressmen might make it unfeasible to use women for this particular skill, an expanded program for employing women at lesser skills is definitely

indicated. (See Modern Lithography, November and December.)

MOST encouraging bit of news from the WPB for the industry was its action in amending Copper Order M-9-c-3, which released an estimated half million pounds of bronze powder and bronze powder products for printing and publishing and decorative uses.

Since substitutes for bronze powder have been generally unsatisfactory for many of its uses, this action will have a stimulating effect on the industry. However, it is to be borne in mind that no further bronze powder is being manufactured, and hence, despite the large quantity released by the order, conservation should be exercised by the industry to spread the existing supply over as long a period as possible.

P

War

ACRAME

St. Loui

ALT LAI SAN DIES SAN FRA SAN JOSE

SEATTLE,

PRINGFI

OPEKA, ROY, N.

ULSA. C

YAKIMA.

NEW YOR

EW ZEA

Simultaneously with issuance of this order, the WPB amended Copper Order M-9-c, cutting the use of copper by the industry to 60 per cent of a base period. Formerly, the limitation was 70 per cent.

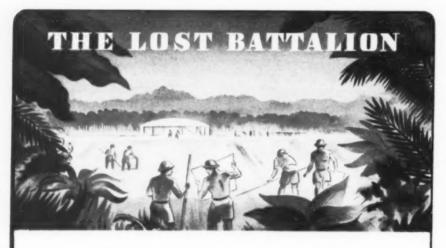
This same order prohibits the use of copper for engraving plates for greeting cards, business stationery, and calling cards. Effect of this action may conceivably be to increase demand for lithographed greeting cards.

Issuance of Limitation Order L-233 cutting production of photographic film will tax the ingenuity of the industry to "get more out of less"—as WPB officials have described the general program of producing goods with the limited supplies available. (See Page 22 for complete story on film order.)

Feeling in some Washington circles is that despite the severity of the zinc order, the industry's position under its provisions is far from critical. By regraining plates in inventory and by the permitted purchase of new zinc to the extent of 50 per cent of the base period, the industry can meet its requirements. Here again, however, conservation continues to be the important factor. *

Form Metals Committee

A National Committee on Critical Metals for the Graphic Arts Industries has been organized for the purpose of devising methods of making the most of available critical metals and to examine possible substitutes. Made up chiefly of publishers and men in the photo-engraving trade, the committee does not list any representative of the lithographic industry. According to preliminary announcements the group will present a toll arrangement plan in detail to the Printing and Publishing Branch of the WPB.



Somewhere in the steaming jungles of no man's land, engineers are building airports, according to well developed plans, equipped with the finest instruments and years of training. However, they would be handicapped if their plans were not made on strong durable paper. They would be another lost battalion.

Likewise, office clerks, equipped with the most modern typewriters, accounting machines, filing devices, are a lost battalion unless they are given the most efficient papers to use in their daily work — Parsons Papers.

These papers are fabricated with fine cotton fibers to give them durability, strength and permanence, yet cost no more. Ask your paper merchant to show you the range of—

Parsons Paper

Specialized for Modern Business

BOND PAPERS For correspondence, documents and forms of every description

LEDGER PAPERS For accounting systems, records, certificates and other permanent needs

INDEX BRISTOLS For machine accounting, index record cards and general uses

TECHNICAL PAPERS Made to your specifications for all types of special requirements

PARSONS PAPER COMPANY . HOLYOKE, MASS.

Leading PAPER MERCHANTS

who sell and endorse

Warren's Standard Printing Papers

ALBANY, N. V. Hudson Valley Paper Company ALBANIA, G.A. Sloan Paper Company BALINKORE, MD.

The Barton. Duer & Koch Paper Co.
BATON ROUGE. LA. Louisiana Paper Company. Ltd.
BIRKINIGHAM. ALA.
BRISKINGHAM. ALA.
BRI

The Diem & Wing Paper Company
The Diem & Wing Paper Company
CLEVELAND, OHIO
The Alling & Cory Company
COLUMBUS, OHIO

The Diem & Wing Paper Company

The Diem & Wing Paper Company

Olmsted-Kirk Company

DENVER, COLO. Carter, Rice & Carpenter Paper Co.
DES MOINES, LIOWA
DETROIT, MICH. Seaman-Patrick Paper Company

EUGENE, ORE.
FORT WORTH, TEXAS
FRESNO, CAL.
Zellerbach Paper Company

Olmsted-Kirk Company
Zellerbach Paper Company
Zellerbach Paper Company

Olmsted-Kirk Company
Zellerbach Paper Company

Quimby-Kain Paper Company

The John Leslie Paper Company
Hartford, Conn.
Houston, Texas
Indiamportal Henry Lindenmeyr & Sons
Houston, Texas
Indiamport & Sons
L. S. Bosworth Company
Lessonville, Fla. Virginia Paper Company, Inc.
Kansas Chiy, Mo.
Lansing, Mich.
Little Rock, Ark.
Loutsville, Ky.
Long Beach. Cal.
Loutsville, Ky.
Lynchburg, Va.
Milwaukee, Wis.
Milwaukee, Wis.
Milwaukee, Wis.
Minneapolis, Minn.

The John Leslie Paper Company
NEWARK, N. J.
Henry Lindenmeyr & Sons
Lathrop Paper Company, Inc.
NEW HAVEN, CONN.
Storrs & Bement Company
NEW ORLEANS, LA.
Henry Lindenmeyr & Sons

NEW YORK CITY

Alio Paper Company

The Canfield Paper Company

Marquardt & Company, Inc.

Schlosser Paper Corporation

OKLAHOMA CITY, OKLA. Western Newspaper Union
OMAHA. NER.

OMAHA, NEB.

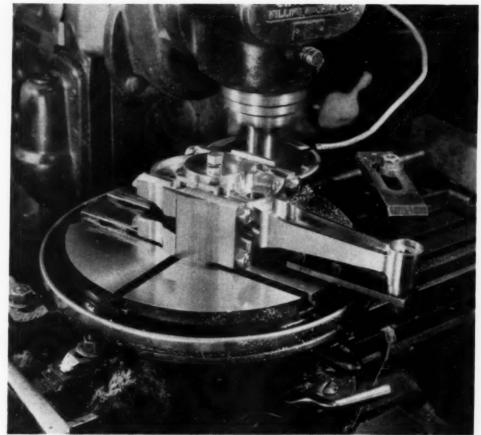
Field-Hamilton-Smith Paper Company D. L. Ward Company Schuylkill Paper Company Zellerbach Paper Company C. M. Rice Paper Company Zellerbach Paper Company Zellerbach Paper Company D. W. Wilson Paper Company The Alling & Cory Company Zellerbach Paper Company Zellerbach Paper Company Zellerbach Paper Company Sax Diego, Cal. Zellerbach Paper Company Zellerbach Paper Comp

The Paper House of New England
Topeka, Kan,
Toopeka, Kan,

EXPORT AND FOREIGN

NEWYORN CITY (Export) National Paper & Type Co.
Agencie or Branches in 40 cities in Latin America
and West Indies.

AUSTRALIAN B. J. Ball. Ltd.
NEW ZEALAND B. J. Ball. Ltd.
HAWAHAN ISLANDS Honolulu Paper Co., Ltd.,
Agents for Zellerbach Paper Company



Taft Pierce Co. photograph by Creative Photographers, Inc.

Warren's Cumberland Offset PRE-CONDITIONED

WOVE • SAXONY • HOMESPUN • LINEN • HANDMADE

ARREN'S Cumberland Offset is *pre-conditioned* by the exclusive process that has been used successfully on Warren's Label papers. Under average pressroom conditions, both winter and summer, Cumberland Offset may be run directly from the case or skid without further conditioning by hanging.

Comprehensive pressroom tests indicate that Cumberland Offset exhibits a minimum of stretch or shrinkage under changing atmospheric conditions. Tendencies toward curling and "cockling" are held to a minimum—even under extreme conditions of relative humidity.

Because of its flat-lying properties Cumberland Offset is a "production" sheet which may be run at maximum press speeds.

Write for free booklet—"How Will It Print by Offset"

S. D. WARREN COMPANY • 89 BROAD STREET, BOSTON





Lithographed in 4 colors

Warren's Cumberland Offset PRE-CONDITIONED Wove & Special Finishes

NEW EQUIPMENT AND BULLETINS

199 Ways to Sell Printing

Issued by the Oxford Paper Co.. New York, the booklet "199 Ways to Sell Creative Printing in Wartime," is devoted to answering the question. "What can a printer do now?" Pointing out that the printer or lithographer is faced more with a shift than a shortage, it tells how to find new business to replace the old. Under various types of business headings are listed opportunities for creative selling. The headings include: Advertising and Merchandising: Business. Personal and Professional Services: Civilian Defense Agencies; Educational Institutions; Employee and Public Relations: Financial Institutions: Government Work: Hotels and Resorts: Manufacturing Concerns: Municipalities: Organized Groups: Public Utilities; Publication Printing; Retail Outlets; Transportation; and Wholesale Houses. The booklet is 81/2" x 11", 20 pages and covers. offset in two colors. It is available from the company at 230 Park Ave., New York.

Continue Outdoor Promotion

Another in a series of promotion folders has been distributed by Outdoor Advertising, New York, national sales representative of the outdoor industry. It is built around the theme, "Outdoor Circulation, Basically the Same, Always." It points out that today's conditions calling for work and recreation, take people outdoors. The folder is in three colors, 81/2" x 11".

Issue 57th Photo Annual

The 1943 American Annual of Photography, volume 57, is being distributed by the American Photographic Publishing Co., Boston. The 276-page book contains articles on a wide range of subjects within the field of photography, and devotes over 70

full pages to outstanding photographs made recently. The book sells for \$2.25 in a cloth binding, and \$1.50 in paper binding.

See "Not Too Dark" Ad Year

On the whole, 1943, should not be too dark a year for advertising, according to a year-end summary of the field in the *New York Times*. The *Times*' summary follows:

"The end of one of advertising's most trying years finds the field with numerous problems ahead of it but feeling more confident than it had been at the beginning of 1942. From a volume standpoint, the decline was held to about 5 per cent, with each medium registering a better showing than it had expected at the beginning of the year.

"In 1943, in addition to doing an all-out job for the war effort, the advertising field will have to contend with various threats to established trade-marks, inherent in the projected programs to concentrate industry. pool facilities and curb cross-hauling. Group and institutional campaigns are expected to continue on the rise. Media will encounter more difficulty from the standpoint of supplies, such as paper and metal. On the whole, however, the outlook is not too dark. and while some declines are expected. they will not be too serious, according to informed opinion."

Announce Art Annual

The 21st Art Directors Annual, containing 300 examples of advertising art and magazine illustration is announced. It contains over 500 illustrations, many in full color. It is printed on heavy stock and bound in red buckram. Selling for \$6.00 it is published by Watson-Guptill Publications, Inc.. 330 West 42nd St., New York.

Publish Fifth Hoch Book

Production Standards and Economic Cost Values for Printers, in a revised edition by Fred W. Hoch has recently been published by Fred W. Hoch Associates, New York. It is the fifth book in a series offered to the graphic arts industries under the title "Standard Management Series." The latest book contains production standards in hours and decimal hours and a dollar and cent value for each operation in the industry. These are said to be useful as a guide in establishing the cost value of the work produced in any plant regardless of its hour cost rates. The index shows 53 operational classifications covering copyfitting, composition, presswork, binding, and shipping operations. The book contains 64 pages, is on 150 lb. basis offset stock and is 6 x 9 inches.

Issue Paper Quarterly

Permanized Quarterly, the novel publication of Whiting-Plover Paper Co., Stevens Point, Wis., was distributed during December. It contains articles written for lithographers and printers covering letterhead design, copywriting, production notes, and the outlook for 1943. Included in the packet was a booklet "This Our Christmas," planned for children, consisting of carols and plans for a Christmas Eve program. A folder of cut-out Christmas scene figures was also included

Driscoll Issues Folder

A folder illustrating their offset and lithographic inks has just been distributed by Martin Driscoll & Co., Chicago. The folder contains a four color offset reproduction of a painting of chrysanthemums and makes use of Driscoll process inks in yellow. red. blue and black.

DIG IN ...



It will be a tough winter for any lithographer who doesn't dig in for orders because it's still a buyers' market in lithography. The ones who get the orders will be the ones who really DIG.

But there is also a little more to it than just digging. One way to be sure of repeat orders is to turn out only the highest quality work. Jobs that will be a credit to your name.

ECLIPSE DEEP-SET BLACK is one good black ink you can depend on for 100% performance. Order it today for the next job that's scheduled for your pressroom.

Gaetjens, Berger & Wirth, Inc.

35 YORK ST., GAIR BLDG., BROOKLYN, N. Y. 538 SOUTH CLARK ST., CHICAGO, ILL.

Color or Black & White



HAMMER

DRY PLATES

9 9

and FILM

2 2

are the choice of discriminating craftsmen for negatives and positives.

HAMMER PANCHROMATIC PLATES A.H.
SOFT GRADATION
COMMERCIAL
PROCESS
CONTRAST

HAMMER SUPER PROCESS PLATES A.H.

HAMMER OFFSET PLATES A.H.
SPECIAL ORTHO
ORTHO
REGULAR

HAMMER OFFSET FILM A.H.

SPECIAL ORTHO HALFTONE REGULAR

SEND for descriptive booklet Dept. M. L. 9



OHIO AND MIAMI

ST. LOUIS, MO.

STUDY WAR CONVERSION

(Continued from Page 31)

ready to duplicate these special machines to meet competing costs.

The Assembling and Packing of Army Ration K

This is a wer production possibility that is large enough to be attractive to a large plant or to a group of plants. There are millions of units to be assembled and packed, tons of material to be handled, large scale purchasing of the components and pecking materials and a delivery schedule that will require a lot of hustling.

The study of the methods of packing this ration was made in the bindery of one of the members. An assembling or working position was set up and many methods and ideas were tried out to determine an efficient method of assembling the items. The final method was based on the accepted practice of having the operator use both hands for carrying and placing the items in the assembly tray with a balanced and easy swing for a high productive rate and a low fatigue factor. Time studies were made to compare the relative merits of methods.

The items to be assembled include two kinds of biscuit, a package of meat or cheese, dextrose tablets or a fruit bar, coffee or bouillon powder, wrapped lumps of sugar and a stick of chewing gum to top off the meal. Actual assembly of the components is made in an open metal trav the same size as the carton, and, with the adding of the last item properly placed, a carton is slipped over one end of the tray and the components slid into the carton. Cartons are of the open end, end-seal type. After the carton is filled, there follows the sealing of the ends and the further processing of the carton according to the type of packing that is de ired.

Orders for this ration are usually in units of one million rations or three million cartons (meals). The total weight of an order of this size ready for shipment in steel strapped wooden boxes is about 1,500 tons. If all of the components were delivered at the same time over 1,022 skids would be required for handling. This does not include the skids of cartons, wooden boxes, and other supplies. Operating space is estimated at about 12,000 square feet. The delivery schedule makes it necessary to operate two The high delivery rate required to complete the contract in the allotted time is one of the definite problems of this job.

Twenty-one tons of paraffine will be used in the coating of the cartons and fifteen tons of steel strapping will be required for the protection of the

wooden boxes. The large amount of financing and the necessity for the printer-contractor to purchase some twenty items from as many sources and to secure delivery of these items so that his production line may be in continuous operation has attracted the attention of all who have inquired regarding ration packing. It is a contract that deals in large figures.

The Possibilities of Light Wooden Boxes or Cases

There is some contracting for special wooden boxes made for casing instruments, maps, blueprints and special devices. These boxes have special compartments and small supporting partitions. Tools needed would be a circular saw, possibly a band saw and a sanding machine. All of the wood is light in weight. These are all possible for a printer to produce.

Stripping Ends of Electric Cable

The job consists of cutting cable about one inch in diameter into lengths of about 18 inches and then removing the insulation from one end a distance of about 1¼ inches. There is a woven metal sheath next to the two pairs of wire. Quantity required, 80,000 pieces.

We are informed that cable of this character can be readily cut on a circular saw and that the same saw can be used to cut the insulation down to the sheathing for stripping. Special tools are also available for performing this operation.

This job is worth consideration by any printer who has some ingenuity and wants to enter war work in a small way. Other orders of like character seem to be available.

Making a Rubber Covered Three Condenser Cord Assembly

This job is similar to work that several printers have used as a fill-in during the summer slack. It consists of stripping a four-pair rubber covered cable for about 12 inches at each end and then soldering terminals on the end of each wire. Quantities are large. Tools are available for most of this stripping and the soldering of the ends is a simple operation. This job has been offered several times for sub-contracting.

Cutting and Plating Short Lengths of Rods

Inquiry was made some time ago for a sub-contractor to cut some 600,000 pieces of ½-inch and %-inch rod to a length of 18 inches, ends to be square, and the rods then given a plating of cadmium. This is another job that might be handled in a printing plant. Cutting might be by small punch press and die, by sawing or by special equipment. Note that there is no machining. The plating with cadmium would be by an outside contractor.

Possible activities that are still being investigated include:

Casting of Army Insignia on a Ludlow Machine

The Use of Plastics for War Products and Printing Plates

Sub-contracting Parts for Signal Flares

Possible Casting of Elrod Strip for War Production

Waterproofing Canvas for Army Orders

Use of a Special Matrix for the Packing of Thin Parts

Possible Die Cutting of Washers

Die Cutting and Sewing of Leather Goods,

Die Casting and Sewing of Canvas Goods

Making of Stencils for Marking Government Equipment

Making and Printing Scales Similar to Rulers

Printing of Air Raid Phosphorescent Signs

Printing of Paper Sand Bags for Bomb Protection

Printing of Instructions directly on Bandages

Building of Items by the Use of Plywood and Resin Glues

Making of Paper Parachutes for the Signal Corps

Printing of Poster Sheets for Camouflage

Printing of Name Plates to Be Mounted on Embossed Panels

The Covering of Fire Extinguishers with ε Red Paper Sack to Reveal Tampering

The Hot Embossing of Impregnated Paper for Electrical Parts

Forming of Impregnated Paper for Plane Parts

Molded Trays for the Assembly of Small Parts

Small Blackboards for Field Instruction

The Making of Treated Wood Products

N conclusion the report states that conversion of a printing plant to war production is possible in only a very limited degree, and practical conversion means that the plant actually enters a new industry. It is probable that the war work would be in the sub-contractor class, and sales efforts would be to prime contractors and not to government agencies.

Continued research is planned by the association and in an outline of the plan attention is given to plastics. plywood, impregnated paper in a new form, new ideas in woodworking, and QMC contracts.

Complete information may be obtained from the association at 105 West Monroe St., Chicago, ★ ★



VASTLY IMPROVED VULCAN ROLLERS wait beyond War Horizons

ALTHOUGH heavily engaged in war production, Vulcan has ear-marked many of its important new discoveries for use in making peacetime rollers. There will be mighty improvements over anything you have yet seen.

Just as soon as peacetime production is resumed, these greatly advanced Vulcan rollers will be available to lithographers everywhere—assuring presswork whose quality and dependability will be enhanced far beyond present high standards.





VULCAN PROOFING

First Ave. and Fifty-Eighth St., Brooklyn, N. Y

3586

1943

wishing you a very

HAPPY and PROSPEROUS NEW YEAR

J. H. & G. B. SIEBOLD, INC.

Manufacturers of Printing and Lithographic Inks

OFFICE:

FACTORY:

47 Watts Street

101 Sixth Avenue

NEW YORK, N. Y. Phones: WA'ker 5-5565-66-67-68

Our biggest job now is to hasten Victory

BUY WAR BONDS
NOW

YOURS FOR SOUND BUSINESS... BEFORE AND AFTER VICTORY

G. CRAMER DRY PLATE COMPANY

NEW YORK

ST. LOUIS

CHICAGO

LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department of Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents in coin or U. S. stamps. Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio. Original articles cannot be furnished except as photographic copies at twenty cents per page, plus six cents postage for each four pages or less.

Photography and Color Correction

Notes and Comments. W. P. Hislop. "Process Engravers' Monthly," 49, No. 586, Oct., 1942, pp. 270-1. A practical method of making focusing scales for any process camera is described in detail. A scale accompanies the article, which can be photographed to the required size and used for setting the copyboard distance. Both this scale and the one described for camera extension are marked in reduction percentages.

Color Correction. Kodak, Ltd. "British Patent" No. 547,519. This invention relates to multi-color photographic elements for printing and in particular to such elements and methods of producing them wherein means are provided to bring about color correction, by the aid of an integral color correcting mask in which two or more emulsions are on a single support. ("British and Colonial Printer and Stationer," 131, No. 732, Oct. 29, 1942, p. 160.)

Improved Negative. Ellis Bassist (to William Craig Toland, trustee). "U. S. Patent" No. 2,301,770 (Nov. 10, 1942). As an article of manufacture a negative comprising a base having translucent portions and opaque portions, said opaque portions of the base including a vinyl resin, gum arabic, a water-insoluble colloid, an opaque material, and a chromic salt which has been exposed to photographic light.

Shop Talk. I. H. Sayre. "Modern Lithography," 10, No. 11, Nov., 1942, pp. 41, 43. The production of a moire pattern when copying half-tones is discussed and a formula is given for finding the best screen ruling. Domestic egg albumin, an adhesive for cello-

phane, black and whites from Kodachrome, exposures to get more detail in color separations, a developer for paper positives to give maximum contrast, and one which will give softness and detail, are also discussed.

The New Deflaro Lenses. Carl E. Barnes. "American Photography," 36, No. 11, Nov., 1942, pp. 26 thru 28. The author explains the principles underlying the coating of lenses, and demonstrates the practical advantages of lenses so coated. In these "Deflaro" lenses the coatings reduce the amount of light reflected at the airglass surfaces and thus increase the brilliance of the image and eliminate flare spots. The method of coating the lenses is briefly described. The speed of a lens may be increased by 30 to 50 per cent, depending upon the number of glass-air surfaces in the

Anti-Reflection Coatings for Amateur Lenses. Milo A. Durand. "American Photography," 36, No. 11, Nov., 1942, p. 28. The advantages and disadvantages of coating existing lenses is briefly discussed. The author believes that a lens should be coated only if there is a special advantage to be gained from the slight increase in speed, from the reduction of flare spot intensity, or from increase in sharpness of the resulting photograph.

Color Correction of Lenses. Milton I. Schwalbe. "American Photography," 36, No. 11, Nov., 1942, pp. 12-3. The chromatic abberation of lenses and its correction is discussed. Longitudinal color aberration can be corrected to a reasonable degree of accuracy without too much trouble. In the correction of transverse color aberration, however, a compromise is necessary between color correction and the correction of coma and spherical aberration. The lenses in use today are divided into four groups according to their construction and use. The limitations and uses of each type are described.

Your Photography. Walter A. Kaiser. "National Lithographer," 49, No. 11, Nov., 1942, pp. 15-6, 18. Ideal reproduction is almost non-existent, but great improvements can be expected. The camera, when skilfully operated, probably introduces the least part of the error, but great improvement can be effected in many cases in camera work alone. For line work, the stop which gives the sharpest image should always be used. This is usually not the smallest stop, but it often is f/22. Contact half-tones

have better printing dots than camera half-tones, because the dots are more stencil-like. Evaluation of the small tone differences involved in improved reproduction is difficult without a densitometer. Color reproduction is briefly discussed.

Principles of Photographic Reproduction (Book). Carl W. Miller. The Macmillan Company, 60 Fifth Avenue, New York, \$4.50 (Probable). This rigorous, systematic treatment of modern photographic principles and processes covers lens optics, monochrome and color reproduction. Important printing processes are also treated, including the bichromated colloid methods. The material on color photography and reproduction is particularly inclusive. The book is well illustrated and includes a number of color plates. ("Review of Scientific Instruments," 13, No. 10, October, 1942, p. xi.)

Planographic Printing Surfaces and Plate Preparation Improvements in Planographic

Printing Plates. Frank B. Dehn. "British Patent" No. 547,517. This patent relates to planographic printing plates and to methods of preparing planographic printing plate surfaces. It includes a base and a coating of hydrophilic vinyl compound presenting water - receptive non - printing areas, characterized in that a filter is incorporated in the hydrophilic coating. This invention claims to produce for lithography a printing surface of metal that will give printing effects equivalent to or better than those obtained with lithographic stone printing, and to make available a simple, cheap and efficient printing plate capable of effecting improved printing quality. It is accomplished by applying a thin layer of the hydrophilic vinyl compound and filter; this film is allowed to set and is then moistened and the usual operations of the albumin process thereafter carried out. The non-printing portions of the plate will absorb and retain moisture and are thereby desensitized to grease better than with the usual grained plate. ("British and Colonial Printer and Stationer," 131, No. 732, Oct. 29, 1942, p. 160.)

Photo Lithography. A. Haigh and H. M. Cartwright. "Process Engravers' Monthly," 49, No. 586, Oct., 1942, pp. 274-5. The theory of the action of light on bichromated colloids is discussed and the "dark" reaction is also explained. The sensitivity of bichromated colloids is not uniform





WHEREVER A PHOTO-PROCESS SPEEDS PRODUCTION FOR VICTORY

For lithography and photo-engraving, for photocopying, Defender Litho and Photo-Writ products meet the most difficult reproduction problems of war production.

DEFENDER LITHO TRANSPARENT - ORTHO - water proof base—for economical production of line negatives in lithography and reproductions for engineering use.

DEFENDER LITHO FILM—ORTHO—safety base—high resolving power for efficient halftone and line work.

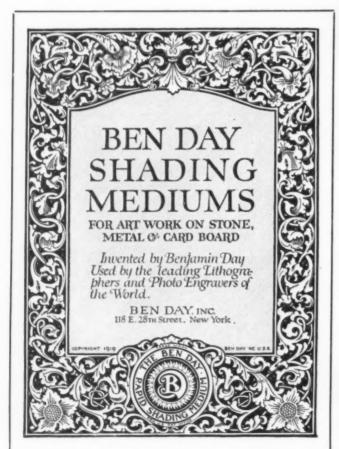
DEFENDER LITHO NEGATIVE PAPER-ORTHO-for line

DEFENDER LITHO PLATES-ORTHO-for high contrast

DEFENDER LITHO DEVELOPER 7-D-in convenient ready-

DEFENDER PHOTO-WRIT-for high quality photo-copying Nine grades to meet every requirement

DEFENDER PHOTO SUPPLY CO., INC., ROCHESTER, N. Y



American-Made LENSI for Photolithography "The Most Exact Tools"

ARTAR APOCHROMAT f:9 to f:16

f:9 to f:16

The ideal lens for color separation negatives. Color-corrected to produce images of the same size, to correctly superimpose in the finishing process. Focal lengths: 9½ to 70 inches. New sizes 4" and 6" for color separation blowups from 35 mm. Kodachrome.

GOTAR ANASTIGMAT f:6.8. f:8. f:10

Assuring freedom from tortion, this is the ideal lens for intricate subjects requiring an intense clarity of Focal lengths c'efinition. 81/4 to 24 inches.

GOERZ PRISMS

of the Highest Accuracy—For reversed negatives to save stripping the film, and reduction work

For FREE literature address DEPT. P-L 1

CPGOERZ AMERICAN OPTICAL CO NEW YORK CITY

American Lens Makers since 1899

over the entire spectrum but reaches a peak in the ultraviolet region. However, light which is not transmitted by the glass and negative cannot affect the albumin coating and therefore part of the effective ultraviolet rays are cut out. Relative humidity also affects the rate of hardening of bichromated colloids, both the "dark"

and light reactions.

Planographic Printing. William Craig Toland and Ellis Bassist (to Toland, as trustee). "U. S. Patent" No. 2,302,816 (Nov. 24, 1942). That improvement in methods of planographic printing which consists in providing a planographic printing plate made up of grease-receptive printing portions and water-receptive non-printing portions of polyvinyl alcohol, said non-printing portions including an ingredient for limiting the water-absorptive character thereof and a finely divided filler adapted to further limit the water-receptive character of the non-printing portions, treating the surface of the plate with hot water, then applying a hygro-scopic liquid material to the plate surface and allowing the hygroscopic material to become absorbed in the non-printing portions, then applying a greasy ink to the plate and printing.

Improvement in Printing Plates. William Craig Toland and Benjamin B. Burbank (to Toland, trustee). "U. S. Patent" No. 2,302,817 (Nov. 24, 1942). As an article of manufacture, a planographic printing plate presenting printing portions and non-printing portions, said non-printing portions comprising water-receptive polyvinyl alcohol obtained from a solution of polyvinyl alcohol polymers containing no cold-water-solubles.

Printing Plate. Clements Batcheller. "U. S. Patent" No. 2,302,669 (Nov. 24, 1942). A printing plate formed of alloy steel containing at least 6%, by weight, of chromium and having printing and non-printing areas thereon, said printing areas comprising a colored film substantially integral with said steel containing oxides of iron and chromium and forming the printing image; the non-printing areas of said plate being substantially free of said oxide film.

Equipment and Materials

Printing Press. Armand C. Schulz. "U. S. Patent" No. 2,301,324 (Nov. 10, 1942). The combination with a printing press cylinder, of a dampening roller contacting therewith, to supply water thereto; means for supplying water to said dampening roller including a roller contacting the dampening roller; and a distributing roller contacting with the periphery of said dampening roller at the uppermost point thereon and longitudinally vibrating relatively thereto.

Substitute Materials. J. S. Mertle. "Photo-Engravers' Bulletin," 32, No. 4, Nov., 1942, pp. 189 thru 203. Since photo-engraving was established in 1826 a large number of processes and materials have been introduced but most have fallen by the wayside. Satisfactory substitutes for many of the time-tested chemicals and supplies have not yet been discovered. The prospects for adequate substitutes for silver nitrate, photographic developers, colloids, bichromate, copper and zinc, etching mordants, and solvents, are discussed.

New Lithograph Press Heater-Dryer. William J. Stevens. "National Lithographer," 49, No. 11, Nov., 1942, p. 20. A description is given of a new type of electric infra-red heater for drying printed sheets. It is claimed that this drier eliminates many of the disadvantages of older types. It is suspended between the delivery grippers and thus cannot interfere with the dampening unit, and is not too near the blanket.

Paper and Ink

Treatment of Pigments with Ammonium Naphthenate. Harold E. Burdick (to E. I. du Pont de Nemours & Company). "U. S. Patent" No. 2,294,380 (Sept. 1, 1942). A process for the production of pigments of improved texture which comprises mixing with an aqueous suspension of a chrome green pigment, prior to the removal of water by drying, between about 1% and about 7%, based upon the weight of the pigment, of ammonium naphthenate.

Pigment Treatment. John Owen Morrison and Ben H. Perkins (to E. I. du Pont de Nemours & Company). "U. S. Patent" No. 2,282,303 (May 12, 1942). A process for the production of improved pigments which comprises incorporation into an aqueous pigment paste a petroleum nitrogen base and a water-immiscible volatile solvent boiling between about 60°C. and about 250°C., mixing, and thereafter drying the pigment.

Soap-A Versatile Agent in Ink Manufacture. Anonymous. "American Ink Maker," 20, No. 11, Nov., 1942, pp. 29, 31. Soaps are composed of a long hydrocarbon chain which attracts other hydrocarbon molecules and an oxygenated end which attracts water and metallic ions. This combination of properties finds many applications in ink manufacture. Soaps are used in emulsion inks. They are valuable as dispersing agents for ink pigments. Soap is one of the components in stencil ink, water color ink, and heattransfer ink. Soap is also used in lithographic crayons and inks.

Fast-Bodying Linseed Oil. Anonymous. "American Ink Maker," 20, No. 11, Nov., 1942, p. 37. A new, fast-bodying activated linseed oil has been developed by the National Lead Company, New York. The new product, known as Seven-Ten oil, is said to be a very fast-bodying oil which produces varnishes which set rapidly and dry to hard films in a relatively short

time. The material is available in three initial viscosities, V, Z-3, and 10-M. The "V" consistency has the following constants: specific gravity 0.9675, weight per gallon 8.06 pounds, acid number 12, iodine number 143, refractive index 1.4881, color (Gardner) 15, and gel time at 565 degrees Fahrenheit of 99 minutes. The oil is recommended for use in printing inks, overprint varnishes and other specialties.

Zein in Lithograph Paper. A. L. James. "The Paper-Maker," 104, No. 4, Oct. 1, 1942, p. 148. Zein may be used as a substitute for casein in clay coatings for lithographic paper. In order to make the paper sufficiently water-proof, however, a metal salt of a weak acid must be dispersed in the coating. A formula is given of zein 382 parts, water 1,600 parts, sulfonate tall oil 75 parts, and caustic soda 15 parts. To this mixture is added a solution of 20 parts lead acetate and 200 parts of water. Directions for mixing are given.

Instrumentation Studies. XL-Measurement of the Tensile Strength of Paper, Part I: General Considerations of the Factors Affecting This Measurement. Staff of the Institute of Paper Chemistry, "Paper Trade Journal," 115: No. 5, July 30, 1942, pp. 12, 14 thru 15, 18; No. 7, August 13, 1942, pp. 14, 16 thru 18, 21-2; No. 19, Nov. 5, 1942, pp. 18, 20, 22. Tensile testers are classified according to the method of loading the specimen. Following this classification, pendulum, inclined-plane, hydraulic, and spring types of instruments are described. The dead-weight method of calibrating the several types of instruments is discussed. It is shown that pendulum-type testers should not be calibrated by allowing the test weight to ride down on the lower clamp because the follow-through of the loaded pendulum causes a serious error, particularly at : mall loads and high clamp speeds. Calculation of the follow-through of the pendulum of a typical instrument in the actual testing of a specimen shows the followthrough to be much smaller than that of the pendulum loaded with the dead weight and to be negligible except when weak papers are tested at high speeds. The effects of rate of loading, specimen length, and specimen width are reviewed and additional data are presented. Tensile strength increases as the rate of loading increases and decreases as the specimen length increases. It appears that the relative tensile strength (tensile strength per unit width of specimen) should be independent of specimen width for wide specimens but that it should decrease rapidly for widths less than approximately half an inch.

Miscellaneous
Science in the Industry. Dr. F. W.
Clulow. "British and Colonial Printer
(Continued on Page 61)

MAKERS OF

THE FINEST QUALITY COLOR PLATES

OFFSET LITHOGRAPHY

THE STEVENSON PHOTO COLOR SEPARATION CO.

400 PIKE STREET

CINCINNATI, OHIO

WHAT-NO GAS?

Salesmen all over the country are faced with empty gas tanks. Even those who have little to sell now find it impossible even to make the good will or service calls they've been making. The problem of keeping in touch with customers is a life and death issue with any business, but the solution is not so drastic. The solution is ink. Ink in advertising. Folders, publications, brochures, booklets, morale builders, calendars. Don't let your customers forget that there is plenty of ink available.

There is no shortage of good inks, ther. Take Crusader Offset Black, r instance. This ink produces beaueither. for instance. tiful solids, and halftones that sparkle with clear sharp contrasts. There's no chance of it rubbing off, or scratching. You'll like it.

Write today regarding a trial order.

BENSING BROS. & DEENEY

401 N. Broad St.

Philadelphia, Pa.

538 S. Wells St., Chicago, III.

umomette



.for fine Offset work

Tag (Long Grain)

24 x36 -500-80-100-108-125-133-150-125-200-225 lb. 93-100-111-130-118-167 lb.

Bristol (Long Grain)

22½x28½-500-100 lb.

Cover (Long Grain)

20x26-500- 65- 80 lb.

26x40-500-130-160 lb.

23x35-500-100-124 lb.

PORT HURON SULPHITE & PAPER CO.

MILLS: Port Huron, Michigan

NEW YORK CHICAGO BEREA, OHIO SAN FRANCISCO

Not a Trace . . .

Every year, thousands of inquiries come to advertisers in business magazines which cannot be traced . . . the vast majority undoubtedly originate from some form of advertising—but where? . . . will you help to identify inquiries? . . . mention the publication if you write to advertisers . . . say you saw it in MODERN LITHOGRAPHY.

THANKS!

Graphic Arts Campaign Gets Assignments

WITH assignments from the Office of Price Administration and from the Office of Defense Transportation in its bag of activities, the Graphic Arts Victory Campaigns Committee is proceeding on its industry-wide program of throwing the entire weight of the graphic arts into the winning of the war.

The OPA has assigned the task of preparing a plan for the interpretation of the new point rationing system to the consuming public, an assignment that may eventually touch every consumer in the nation. The planning committee is proceeding with this presentation. A second assignment, from the ODT is the preparation of a guide, entitled "How to Hold Conventions by Mail." This idea of holding conventions by mail is already being carried out in many industries as one national convention after another is cancelled due to the tight transportation situation. Conventions by mail will offer the graphic arts an opportunity for producing material for mail exchanges of information it was said. The committee is also working on this presentation.

Organization charts have been distributed showing the official working arrangements of the committee. From the central Plan to Promote Printing and Lithography Essential to the War Effort, stems five major divisions. First is the campaign to the user of printing and lithography, to enlist the cooperation of top executives of the larger users of this material. through business papers and direct mail. Second is the campaign to the graphic arts producers and suppliers. This is divided into three sub-campaigns "to keep all divisions of the graphic arts informed of all developments and to enlist support and cooperation"; "to equip producers and suppliers with information and ideas for their contacts with 'users'"; and "to organize local graphic arts groups for extensive local production of essential printing and lithography based on the

government victory campaigns." The next major campaign is publicity, general, business papers, trade papers, and private; then service, to U. S. Government, to users of printing and lithography, and to producers and suppliers; last is a One-Day Conference to be held early this year, to speed up the promotion of vital and urgent government victory projects. This conference is planned to serve as a model for similar conferences to be held later on in other places. No dates or places are set.

The many promotion pieces now under way are shown in rough layout form, in the material distributed by the committee. These include "Guide to Essential Wartime Printing and Lithography," "Guide to Selling Essential Wartime Printing and Lithography," "Ideas on Victory Projects," and others.

TAPPI to Hold Meeting

The annual meeting of the Technical Association of the Pulp and Paper Industry will be held at the Hotel Commodore, New York, February 15 to 18 and an exhibit is planned which will show papers and containers that have been developed to meet war emergencies through the replacement of critical materials with paper products.

Printer Commands Division

Brigadier General Chas. C. Haffner, Jr., treasurer of R. R. Donnelly & Sons Co., Chicago, prior to the war, was recently advanced to the post of commanding officer of the 103rd Infantry division, U. S. Army, at Camp Claiborne, La.

Newark Firm Sold

Cosmopolitan Lithograph Co., Newark, N. J., has been purchased by Baker Printing Co., same city. Abraham Frank, former proprietor of Cosmopolitan was reported entering the armed services.

Young Lithographers Meet

The Young Lithographers Association of New York planned to meet at the Advertising Club. January 13, for a round table discussion of lithographic problems arising from the war.

Announcement

ALL publishers currently face the imperative necessity of reducing their paper consumption as the output of the paper mills continues to drop in the face of expanding demands of the war industries. It is up to the individual publisher to figure out the best means of meeting this situation.

We have three choices. We can operate on the editorial content by reducing the amount of editorial material or by reducing the legibility of the type. We can print on lighter weight paper and so materially reduce the attractiveness of the publication. Or, we can eliminate complimentary circulation. We have decided on the latter course as best calculated to meet the new conditions.

To meet this reduction in our paper supplies and to allow for a normal increase in paid circulation we have eliminated all complimentary distribution. This includes extra copies to advertisers and their agencies, occasional samples to subscription prospects, etc. In this way we can continue publishing MODERN LITHOGRAPHY in its present form and will be able to supply copies for a normal number of new subscribers.

When Quality Counts Most-Use

PANCHROMATIC DRY PLATES

(NON-HALATION)
Here is a summary of useful information that will help you choose the right panchromatic plate for any job.

(Order Code)	CHARACTERISTICS	USES
PP-50 Halftone Pan.	Highest contrast; thin film emulsion. (H.D. 75)	"Direct" process half- tone negatives when sharp solid dots are re- quired.
PP-40 Rapid Process Pan.	Slightly lower in con- trast than above but increased speed. (H.D. 135)	"Direct" process half- tone negatives and a universal standard in use for years.
*PP-20 Special Rapid Pan.	Medium speed and con- trast. (H.D. 700)	"Indirect" continuous tone negatives and posi- tives in lithography and photogravure.
*PP-10 Soft Gradation Pan.	Fast; soft-working long delicate gradation scale. (H.D. 1200)	"Indirect" continuous tone negatives and posi- tives and all color sep- aration work.

"Also furnished in "MATTE" surface. In ordering "MATTE" add
"M" to code. SOLE U. S. DISTRIBUTORS

Complete Stocks

Photo Prompt Service

NORMAN-WILLETS CO.

Mid-West Depot 316 W. Washington St CHICAGO, ILLINOIS Eastern Depot 10 West 33d Street NEW YORK, N. Y.

* * * * * * * * *

VICTORY IN 1943

Victory in 1943 is the hope of every American, and in the winning of that victory lithography has a part to play. It will continue to help in the big job of keeping Americans informed and in maintaining morale.

Whether you're one of the plants turning out large quantities of ration books, whether you're producing smashing posters, or part of the large quantities of mail material that is going in place of salesmen, you'll want the best in litho inks. Crescent's line has a dependable ink for every purpose. Get the facts today.

CRESCENT INK AND COLOR CO.
464 N. Fifth St. Philadelphia, Pa.



GRAINING and REGRAINING

ZINC, ALUMINUM AND GLASS

MULTILITH PLATES OUR SPECIALTY

All sizes new plates in stock for immediate delivery

WESTERN

LITHO PLATE & SUPPLY CO.

1019 Soulard Street

St. Louis, Mo.



THERE ARE DEPENDABLE

MERCK PRODUCTS

FOR EVERY CHEMICAL NEED OF THE PHOTOLITHOGRAPHER

MERCK & CO. Inc. Manufacturing Chemists RAHWAY, N. J.

New York

Philadelphia

St. Louis

In Canada: Merck

Co., Ltd., Montreal and Toronto

CLASSIFIED

All classified advertisements will be charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, \$1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of Modern Lithography, 254 W. 31st St., New York. Closing date: 1st of month.

Position Open:

Comb. Miehle auto pony cylinder and LSB offset pressman. Must be good halftone man. \$50—40 hours. 11½ overtime. Steady, pleasant unorganized. Leonard Printing Co., Bartlesville, Okla.

Position Open:

Step-and-Repeat machine offset plate-maker with full knowledge of making combination label layouts. State salary and full experience. Good opportunity in modern, air-conditioned plant located in the Middle-West. Address Box #841, c/ô Modern Lith-ography.

Wanted:

Harris Offset Press 22 x 34. late model, type E-L. Address Box #840. e/o Modern Lithography.

For Sale:

530 new and used zinc plates for 22 x 34 Model E-L Harris Offset press, P. O. Box 1014, Phone 2-2912, Lincoln, Nebr.

For Sale:

Several thousand used Multilith Plates, size 10 x 14 used for one short run of less than 300 copies. Price: 20 cents each, unregrained, 30 cents each, chemically cleaned. F.O.B. New York, N. Y. Radio City Letter Service, 48 W. 48th Street, New York, N. Y.

For Sale:

24" x 31" Levy Darkroom cameras: 25 Amp, 110 Volt Twin Arc Printing Lamps . . . \$40; Plate Whirler for 22" x 34" Press Plate . . . \$185, 19" x 23" Welse Vacuum Frame Table Model . . . \$75, Gelb overhead printing lamps. Singer Engineering Co., Complete Platemaking Equipment, 212 Mott St., New York.

For Sale:

For cash at these low prices: 1 Harris 22 x 34 Offset Press . . . \$1.950. 1 Baum 21 x 28 Baum Folder . . . \$325. 1 Wright Perforator (30 inch) \$250. 1 Morrison Stitcher . . . \$330. 1 F. & L. Graining Machine \$325. 1 Pair Macbeth Arc Lamps . . . \$100. 1 19" Circular Levey 133 Screen . . . \$380. 100 Zinc Plates 25½ x 36 . . . \$25. Opaquing Tables 22 x 34 . . . \$20 each. 1 Pease Lamp . . . \$10. Chemicals, stones and photo material. Address Box #842. c/o Modern Lithography.

Situation Wanted:

Position as Sales. Plant or General Manager of modern lithographic plant. Sixteen years' experience divided between the above positions; college graduate in chemical engineering; competent; efficient; and able to secure results. Address Box #838, e/o Modern Lithography.

Situation Wanted:

Sales Manager: High type, progressive executive. Many years experience Printing Ink, Rollers and Allied Commodities. Well known in Eastern territory. Beyond draft age. Address Box #839, c/o Modern Lithography.

Porter Stresses Maintenance

The importance of maintenance of present printing press equipment for the duration of the war is stressed in a New Year statement to the lithographic industry by H. A. Porter,

vice-president of Harris · Seybold · Potter Co.

Mr. Porter's statement follows: "Throughout 1942 and for the duration our manufacturing capacity has been diverted, as it should be, from regular pursuits to war demands. Continuation of this policy is necessary to the winning of the war. To our customers we cannot urge too strongly that maintenance of equipment will be increasingly important under the stress of heavy demands—government, war industries and civilian business requirements. This should be an important consideration during 1943."

Observe Tenth Year

Paul M. Hinkhouse Press, New York, is observing its tenth anniversary during January, according to an announcement by Victor DeRose and Paul M. Hinkhouse. The firm's offset division, under the name Hinkhouse. Inc., is now in its fourth year. Offset equipment includes, besides a camera department, three presses, 17" x 22", 36" x 48", and 41" x 54".

Club Contributes Toys

The Litho Club of Baltimore held its Christmas Party, December 21, at the Emerson Hotel, and had a varied program of entertainment following the annual dinner. Members and guests brought gifts of toys which were distributed to children of the Happy Hills Children's Home.

Form Placement Committee

Printers Supplymen's Guild of Chicago has organized a Placement Committee to help members solve their employment problems. J. P. Cline of Cline Electric Mfg. Co., makers of electrical equipment for the graphic arts, was named chairman and director of the new service.

Hold Chicago Ladies' Night

The annual Ladies' Night of the Chicago Lithographers Club was planned for January 9 at the Knickerbocker Hotel. Entertainment chairman Frank Koehne of the Meyercord Co., planned for an attendance of between 300 and 400.

N. Y. Craftsmen to Meet

The New York Club of Printing House Craftsmen plans to meet Thursday, January 21, at the Building Trades Club, 2 Park Avenue, New York.

Picked for the job

ADIRONDACK BOND

a product of

INTERNATIONAL PAPER COMPANY

220 E. 42nd Street, New York, N. Y.



NELSON ASSOCIATES IS EXPENIENCED IN HANDLING EVERY TYPE OF PREPARATORY WORK ON TECHNICAL MANUALS FOR THE ARMED FORCES... RETOUCHING, PHOTOGRAPHY, CREATIVE WRITING, TYPEWRITTEN COMPOSITION, NEGATIVES AND OFFSET PLATES.



COMPLETE TRADE SERVICE FACILITIES

Overnight Airmail Service to Most Parts of the Country

NELSON ASSOCIATES Onc.



ZINC and ALUMINUM PLATES

UNGRAINED-GRAINED-REGRAINED

grained correctly to your specifications
... for your special requirements.
We are manufacturers of METALSHEETS for ROTAPRINT Machines,
also square edge plates for
Multilith Presses.

THE PAOTO LITHO PLATE GRAINING COMPANY

1207-15 S. Highland Ave.

BALTIMORE, MD.

INTERNATIONAL PRESS CLEANERS



are daily demonstrating their efficiency in increasing Output and Lowering Production Costs

This Is Our Method of Removing Ink From Press

We invite you to take advantage of our thirty day trial offer. If interested write and let us know the size and make of your press.

INTERNATIONAL PRESS CLEANER & MFG. CO.

112 Hamilton Ave.

Cleveland, O.

LaMOTTE pH CONTROL METHODS IN THE PLATE AND PRESS ROOMS



LaMOTTE BLOCK COMPARATOR

This compact unit for determining pH of solutions is complete with pH color standards — indicator solutions — marked test tubes and instruction booklet.

Illustrated folder sent on request

LaMotte pH Service offers simple and economical pH apparatus, indicator solutions, etc., for use in determining the pH of fountain solutions, etc.

LaMOTTE CHEMICAL PRODUCTS CO.

Dept. R., Towson, Baltimore, Md.

Free! EVERY PRESSMAN WANTS THIS BOOKLET

Helpful hints about handling inks, compounds, driers, etc. Valuable information prepared by experts. Write for it on your firm letterhead.

It's FREE!

E. J. KELLY CO.

1829 N. Pitcher St. Kalamazoo, Michigan

DO YOU HAVE YOUR COPY OF

THE LITHOGRAPHERS MANUAL?

This book is crammed full of valuable information regarding offset presses, litho inks, platemaking, cameras, lamps, paper, type, color, chemicals, research developments, sales training and promotion, trade associations, as well as miscellaneous production, sales, equipment and maintenance data. You can't afford to be without this book. PRICE \$5.00, postpaid.

Please Send Check With Order

MODERN LITHOGRAPHY

254 W. 31st ST.

NEW YORK CITY

LITHO ABSTRACTS

(Continued from Page 55)

and Stationer," 131, No. 732, Oct. 29, 1942, pp. 156, 161-2, 164. This paper is a discussion of the application of science and the scientific attitude to printing. After defining science and the scientific attitude, Dr. Clulow suggests that in color much confusion could be avoided if scientific terms were used instead of the confusing inaccurate artist's terms.

Photo-Engraving Probabilities. Frank H. Smith. "Paper and Print," 15, No. 3, Autumn, 1942, pp. 116, 118-9. Recent developments, some of which are not yet in the commercial stage, are described. The following are the developments included: plastic plates and plastic type, the "Kodagraph Contact Screen," the "Silvalith" plates for direct projection on metal, automatic controls, new photographic materials, a "repeating back" camera which has many automatic controls, the Wale press, micro copying, and photogrammetry.

LABELS FACE CUT

(Continued from Page 25)

food in tin or glass will result in increased recourse to the quick-frozen and dehydrating processes of food preservation, it seems to be generally agreed. The government has promised its full cooperation in expanding use of these processes, but has warned that promotional schemes or speculative ventures in these two fields will not be permitted. Packaging materials now used for frozen or dehydrated products do not, as yet. lend themselves to any large degree to the lithographic process, so that little hope can be offered for new business in this direction.

Preoccupied with study of the overall impact of the WPB conservation orders on their 1943 operations, canners at the Chicago conference were unable to consider immediately what seems to them at the moment, the relatively minor detail of labels. The full effect of the three orders on the label business will probably not be clarified for some time, but an early start and close cooperation between packers and label suppliers on their mutual problems do. however, seem advisable.*

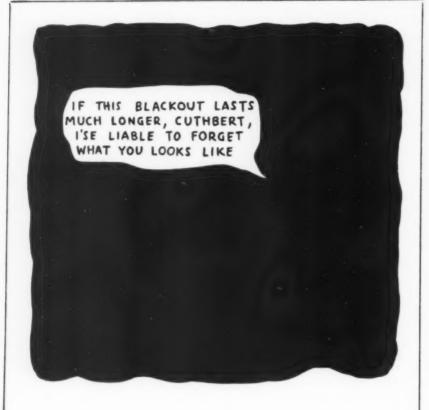
ADVERTISERS' INDEX

JANUARY, 1943

Lithogomobia Dista Craining Co. of

Agfa Ansco	America Inc. 40
American Writing Paper CorpDec.	
	Mead Corp., TheDec.
Bensing Bros. & Deeney 56	Merck & Co., Inc
Bingham's, Sam'l, Son Mfg. Co 32	
California Ink Co., IncDec.	Miehle Printing Press & Mfg. Co 8 and 9
Champion Paper and Fibre Co 14	National Carbon Company. Inc.
Charlton Co., F. MDec.	(Carbon Sales Division)
Chillicothe Paper Co	Nelson Associates, Inc
Classified Advertising	New York & Pennsylvania Co Oct.
Craftsman Line-Up Table CorpDec.	Norman-Willets Co
Cramer, G., Dry Plate Co 52	Northwest Paper Co., The Nov.
Crescent Ink & Color Co. of Penna 58	Oxford Paper Co 4
Day, Ben, Inc	Parsons Paper Co
Defender Photo Supply Co	Photo Litho Plate Graining Co The 60
Dixie Plate Graining CoDec.	Pitman, Harold M., CoDec.
Driscoll, Martin, Co	Port Huron Sulphite & Paper Co 56
E. I. du Pont de Nemours & Co 34	Printing Machinery CoNov.
Eastman Kodak Co	Rapid Roller CoNov.
	Reliable Lithographic Plate Co 13
Fox River Paper CorpDec.	Rising Paper CoNov.
Fuchs & Lang Mfg. Co., Div.	Roberts & Porter, Inc 6
General Ptg. Ink Corp 11 and 12	Rutherford Machinery Co., Div.
Gaetjens, Berger & Wirth, Inc 50	General Printing Ink Corp 30
Godfrey Roller CoDec.	Senefelder Co., Inc 2nd Cover
Goerz, C. P., American Optical Co 51	Siebold, J. H. & G. B., Inc 52
Graphic Arts Corp 58	Sinclair & Carroll Co 42
Graphic Arts Victory Campaigns Committee	Sinclair & Valentine Co 7
	Sorg Paper Co., TheDec.
Hammer Dry Plate & Film Co 50	Strathmore Paper CoDec.
Hammermill Paper CoDec.	Stevenson Photo Color Separation Co. 56
Harris-Seybold-Potter Co 1th Cover	Taylor W A & Co Dos
Howard Paper Co 3	Taylor, W. A., & CoDec. Texas Offset Supply Co., IncDec.
Illinois Plate Graining Co., Inc Dec.	Texas Offset Supply Co., Inc Dec.
International Paper Co 60	Union Carbide & Carbon Corp 42
International Press Cleaner & Mfg.	Vulcan Proofing Co 52
Falls F I Ial Co	W
Kelly, E. J., Ink Co	Warren, S. D., Co
Kimble Electric Co Dec	Western Litho & Supply Co 58
La Motte Chemical Products Co 60	West Virginia Pulp & Paper Co Dec.
Lanston Monotype Machine Co Dec.	Whiting Paper Co., George A 13
Litho Chemical & Supply Co 40	Whiting-Plover Paper CoDec.

(The Advertisers' Index has been carefully checked but no responsibility can be assumed for any omission.)



... blackout?

FTER the war blackout, will your old customers remember who you are and what you sell? While you are buried in necessary war work, will you give them a chance to forget you,—give your competitors a chance to win them away from you? Or will you keep your firm and your products everlastingly before them through regular advertising so that they will not have forgotten you when the blackout is over?

If you want them to remember you "after the blackout" in the lithographic field, we suggest the regular use of advertising space in

MODERN LITHOGRAPHY

254 WEST 31st STREET

NEW YORK

Member Audit Bureau of Circulations

TALE ENDS

A^S we go to press it is reported that a new order governing manufacture of paper is to be released momentarily which will allow increased production of some types of paper. Under the present order production is limited to about 87 per cent. These reports have it that the base period for figuring production will be changed from the present six month period April to September. 1942, to the last quarter of 1941 and the first quarter of 1942. In these two quarters paper production touched an all-time high. The new order is said to provide for quotas of 80 to 100 per cent of the new base. period, which will be a rather high quota compared with long time production averages. This order pertains to production of paper. The order restricting use of paper is also due any minute, the part curtailing use of paper by newspapers and magazines already having been issued. We wouldn't be surprised if this is only the beginning.

Were you amazed at seeing green ink on our cover this month after hearing so much about "Lucky Strike green going to war?" Seriously, it may take some time to get the mistaken idea out of the public's mind that it is unpatriotic to use green ink. We'll also continue to see bronze inks and bronze powder in use, as existing stocks were unfrozen by an eleventh hour reprieve before the December 31 deadline.

Speaking of subscriptions (or were we?), the many, many lithographers who read *ml* every month have been getting their money's worth in coverage of developments in the trade. Government regulations have come so thick and fast lately that it's a full time job to cull them, summarize and present them to the trade in easily-read form. For another reason why more people pay to read *ml* than any other litho trade mag, see page 10.

into

port

sitivi

And

roliti

use I

MODERN LITHOGRAPHY



Balanced Sensitivity

ONE of the most important requirements of a panchromatic film is that it render color accurately into monochrome. An even more important requirement is that this sensitivity be balanced for all colors.

And it is balanced in Agfa Ansco Reprolith Panchromatic.

For this reason, many lithographers use Reprolith Pan in their color separation work. In addition to good

color separation, Reprolith Pan gives you high contrast, great resolving power, wide developing latitude, and full anti-halation protection. You can also get Reprolith in Regular, Thin Base, and Ortho types. You ought to try it. Graphic Film Division, Agfa Ansco, Binghamton, N. Y.

100 YEARS OF SERVICE TO AMERICAN PHOTOGRAPHY

Agfa Ansco Reprolith Films
MADE IN U.S.A.



No other personality in all history has left its imprint more indelibly upon community growth and National spirit than the printer. Courageous and optimistic, he pioneered for education and enlightenment and all the advantages which they bring. He spurred civic pride, fought for law and order, opened a fertile field for initiative and earning power. He gave new impetus to business effort. He left cherished traditions. In many instances, America can thank the printing craft for her wholesome ways of life. ★ And like the Minute Men of early days, the printers of today must be alive to the message inscribed upon the printed page - the reason for it, its purpose and desired influence. Only by such genuine interest can they live up to ideals and further the highest efficiency in our war effort. Whatever the National objective, the printer can simplify the means.

CLEVELAND, OHIO

MANUFACTURERS OF OFFSET LITHOGRAPHIC · LETTERPRESS AND GRAVURE PRINTING MACHINERY .

DAYTON, OHIO

MANUFACTURERS OF PAPER CUTTERS AND TRIMMERS . KNIFE **GRINDERS • DIE PRESSES • WRIGHT DRILLS • MORRISON STITCHERS**